TECHNOLOGY DEPT.

First Copy

A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

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Library
DETROIT

I. J. REUTER HEADS OAKLAND MOTOR

Ayres Sees Motor Gains In 1931; Business Upturn Soon; Tire Stocks Low

Prominent Forecaster Says Industrial Activity Is Now in Sidewise Movement, With Downtrend Apparently Stopped

CLEVELAND, Oct. 15.—Automobile tire shortages are in the making, while lower costs and better values in automobiles after an entire year of greatly reduced production, make it seem reasonable that important increases will result in 1931, says Col. Leonard P. Ayres, vice-president and business forecaster of the Cleveland Trust Company, Cleveland, in the bank's mid-month bulletin issued today.

Readjustments that start business recovery on its way are now at work. Even if increased industrial activity last month as measured by such yardsticks as coal production, freight traffic and steel output were not more than of seasonal proportions, it, nevertheless, is encouraging to note, declares the colonel, that business is no longer slowing down.

"Already this depression has lasted rather longer than have most of the major depressions of recent decades," points out this statistician, "and that is one good reason for believing that some measure of improvement is likely to develop before long.

"Business activity is moving sideways at a low level, but it is not getting worse. It seems probable that we have reached the bottom of the depression, but there is no sure method for estimating how long the bottom may prove to be.

"In the past forty years there have been seven major depressions in this country, including this one. The duration of the definite decline from the last real prosperity month to the bottom of the depression in the first of the seven was twelve months. In the panic of 1907 the decline lasted only ten months. In the depression of 1913-14 the decline lasted fifteen months.

(Continued on Page 11)

RUBBER TRADE READY FOR IMPROVEMENT

New York, Oct. 15.—Depression in the rubber industry is placing the business upon a sound basis for the future, according to the annual report of F. R. Henderson, president of the Rubber Exchange of New York, made public at the annual meeting of the exchange yesterday. He said the depression had caused economies in operations that would result in greater prosperity.

"The rubber industry has not escaped the effects of world-wide economic adjustment in the period under review," the report said. "Perhaps the effect on our industry has been more acute because of conditions peculiar to it.

"In the period of enforced production curtailment and the abnormal price level of 1926-29 the native population of the British and Dutch East Indies planted rubber to an extent unknown until the vast quantities appeared at shipping points in the last year. This additional production came on a market facing under-consumption and partially discounting price effect. The result has been record low levels and accompanying disturbance to consumer as well as producer."

Heads Oakland

I. J. REUTER

FORD'S EDGEWATER, N. J., PLANT EXPECTED TO BE OPERATING ON DEC. 1

Edgewater, N. J., Oct. 15. — The opening of the new Ford assembly plant here will take place about December 1. Plans are now being completed to have the construction work on the factory completed within the next few weeks.

Yesterday saw the first importation of service stock for the local plant and it is purposed to have a steady inflow of such equipment from now until the executive heads are able to announce that business is proceeding on its regular course.

The exterior of the plant is perfected and the allocation of parking space in the grounds for those who will be part of the personnel of the factory or do business there brings a steady stream of cars each day.

The installation of the service stock is now the chief consideration to provide for an early opening and workmen from the Kearny branch of the Ford organization are busily engaged in this work and expediting its completion so that everything will be in readiness by the end of next month.

PRODUCTION OF CHRYSLER EIGHT INCREASED 100%

Detroit, Oct. 15.—Demand on the part of the public for prompt delivery of the new line of Chrysler Imperial Eights has been so great since the announcement in July that production schedules have been increased 100 per cent. over the original estimate.

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BECOMES GENERAL MANAGER; GLANCY GOES TO G. M. STAFF

General Motors to Continue Present Oakland and Pontiac Cars Substantially as They Now Exist, Says President Sloan

NEW YORK, Oct. 15.—I. J. Reuter, vice-president of General Motors and managing director of Adam Opel A. G., Russelsheim, Germany, has become general manager Oakland Motor Car division, Pontiac, succeeding A. R. Glancy, vice-president, who has been transferred to the general staff, according to announcement today by Alfred P. Sloan, Jr., president.

"Oakland Motor Car Division has made important progress under the administration of Mr. Glancy," said Mr. Sloan. "The Pontiac car was added to the Oakland line as a companion car to the Oakland in 1927. It has made for itself an important place among cars of its price class. Total cars produced have been increased from less than fifty thousand in 1925 to more than two hundred thousand in 1929. Thus Oakland is contributing much to the general position of the corporation.

"An entirely new manufacturing plant of modern and up-to-date design and equipment supplementing the previous plant, including a foundry, has been built and organized. A new division of Fisher Body Corporation was created, and a new plant adjacent to the car manufacturing unit erected to provide an adequate supply of bodies. Thus Oakland has become an important factor in the industrial activity of the city of Pontiac.

"It is the intention of the Corporation to continue the present Pontiac and Oakland cars subsantially as they now exist, injecting into their design and manufacture such improvements as may be possible from time to time in line with the policy of General Motors of constant progress with increase in the fundamental value of all its products. This should enable this important operation to maintain and improve the

(Continued on Page 2)

HUPP'S 'SKY ROAD' PARADE TO BE HELD AGAIN THIS YEAR

Detroit, Oct. 15. — Hupmobile's famous sky road parade, a grand success last year when it was inaugurated, will be repeated this year. Instead, however, of it being a Chicago affair, as it was in 1930, this time it will be nationalized.

Distributors and their customers from all parts of the country will come by plane to Detroit, pick up their new Hupmobile eight-cylinder purchases, attend an informal dinner that night, then start home the next day on one of the most sensational driveaways of the year. It is estimated that close to 500 new cars, representing nearly a million dollars' worth of Hupmobiles, will be delivered in this manner. The distributors and their customers are expected to arrive here on October 29, the informal dinner, with no speechmaking, being set for that night and the driveaway scheduled for the 30th. More than a dozen tri-motored planes will be needed to bring the visitors to Detroit, the customers who will drive their purchases home being guests of the dis-

(Continued on Page 2)

Ten Cars Improve Sales Rank in First 8 Months

NEW YORK, Oct. 15.—Ten makes of passenger cars in the first eight months of this year attained a higher standing on the retail sales ladder than they held in the corresponding period of last year, while twenty went down the ladder and four retained the same places they held a year ago, according to complete registration statistics now available for that period.

Ford kept its place at the head of the procession, while Chevrolet maintained its place as runner-up. Buick, however, captured third place definitely, after having occupied sixth position in the corresponding period of last year.

The other two cars to hold their places were Pierce-Arrow, in twenty-eight rank, and Stutz, number thirty-seven.

In addition to Buick, the nine other cars to improve their sales position over last year were Pontiac, jumping from fifth to fourth; Dodge, from seventh to sixth; Plymouth, from tenth to seventh; Chrysler, twelfth to eighth; Studebaker, eleventh to ninth; De Soto, fifteenth to twelfth; Packard, seventeenth to sixteenth; Hupmobile, from eighteenth to seventeenth, and Oakland, from twentieth to nineteenth.

Among the cars that improved their position three were General Motors units, while each of the four Chrysler Corporation passenger cars improved its position all except Dodge jumping more than one rung.

It will be noted that the Whippet dropped substantially but this was due largely to the fact that the

(Continued on Page 2)

Used Car Stocks at Low Point in Charlotte, N. C.

CHARLOTTE, N. C., Oct. 15.—**A survey of the used car situation among leading Charlotte automobile dealers shows that stocks are extremely low, and in most cases the volume of business in September exceeded that of the same month of 1929 by a slight margin.**

The demand for these cars is light, and dealers are generally holding down on the prices allowed on trade-ins. New car sales are likewise above those of last year, and most dealers, expecting new models about the first of the year, are thinning down the supply on hand.

B. C. Scott, president of the Scott Buick Company, reports his used car stocks little below normal, with September sales good, and expects to sell the supply out within the next thirty days.

A similar report was forthcoming from George E. Wilson, Jr., president and treasurer of the Wilson-Pettit Motor Company, Ford dealers, who declared that although his stocks were low, the volume of used car business was below that of last year, and consequently his company was holding down on the price offered on trade-ins.

N. F. Neer of the Packard Charlotte Company reported that used car stocks on hand were lower now than at any other time during the year ,with business holding up fair. September sales with his company likewise exceeded those of last year. At present this concern has only ten cars of this type on hand, and Mr. Neer hopes to reduce even this figure, stating that any dealer with a large supply of used cars on his lot at the end of the year was heading for bankruptcy.

I. J. REUTER BECOMES HEAD OF OAKLAND CO.

(Continued from Page 1)

place in the automotive industry that it now holds."

Mr. Reuter was born in Indianapolis in 1885, joined the Olds Motor Works as general manager in February, 1925, and shortly after was also elected president as well as general manager.

In October, 1929, Mr. Reuter was appointed managing director of the Adam Opel, A. G., one of the largest manufacturing companies in Germany engaged in the manufacture of automobiles, control of which had been acquired by General Motors. Leaving for Germany to assume his new position, Mr. Reuter announced that while he had resigned as general manager of Olds, he still continued as president.

With the election of a new set of officials for Opel, all overseas men, Mr. Reuter included, returned to this country several months ago, since which he has given his attention to Olds as its president, with D. S. Eddins as general manager.

Prior to his first connection with Olds, Mr. Reuter had been with Remy Electric for several years, starting as an engineer and winding up as general manager. His first automobile experience started in Indianapolis during his high school days, when he served as experimental engineer in the Marion and Premier plants.

After graduating from Purdue, he served as an engineer with the Bell Telephone and Johnson Heating Company, then served two and one-half years with Overland when that company was located in Indianapolis, winding up as assistant chief engineer. He joined Remy instead of following Willys to Toledo.

Alfred R. Glancy, retiring as president and general manager of the Oakland Motor Car Company, has held executive positions for the General Motors and du Pont interests for more than twenty years. He had been Oakland president since 1925. For a number of years previous to his joining Oakland, Mr. Glancy was president and general manager of the Glancy Malleable Iron Company of Waukesha, Wis. He also had been manager of the Sampson Tractor Company.

Starting out in construction work after graduation from Lehigh University, he has traveled to the far corners of the world in pursuance of his work. During the World War he had charge of the construction of the old Hickory Powder Plant for the du Pont Company at Nashville, Tenn., the largest plant of its kind constructed in this country during hostilities.

INTERNATIONAL BOOSTER PARTY SET IN CLEVELAND

Cleveland, Oct. 15.—In connection with the Motor and Equipment Association and National Standard Parts Association conventions in Cleveland, the international booster party will be held in the Hotel Winton on November 16.

HUPP'S 'SKY ROAD' PARADE TO BE HELD AGAIN THIS YEAR

(Continued from Page 1)

tributors from whom they purchased the cars.

While not all of the distributors participating will come direct to Detroit by plane, those from Chicago, Indianapolis, Akron, Scranton, St. Louis, Denver, Syracuse, Buffalo, Pittsburgh Philadelphia, Milwaukee and several other eastern and mid-western points have indicated that they will take part in the big flight. Those from points adjacent to Chicago will go by rail to the Illinois city and join the air squadron from that city to Detroit. These include Denver, Kansas City, St. Louis, Milwaukee, Indianapolis, New Orleans and other points.

Other distributors will engage one or two ships and fly direct to Detroit, arriving at the Ford airport to converge with the main flight from Chicago. Still other distributors' parties will arrive in Detroit by train earlier in the day and journey to the airport to meet the combined flights.

Combining with Hupmobile in staging this million dollar driveaway are such well known concerns as the National Air Transport, Ford Motor Company, Goodyear, Standard Oil, Firestone, Gabriel Snubbers, Pines Winterfront, Vacuum Oil, Timken Roller Bearing, Curtis Publishing Company and others.

TIRE SHIPMENTS DECLINE; INVENTORIES ALSO OFF

New York, Oct. 15.—Shipments of pneumatic casings in August by United States tire manufacturers totaled 5,519,867, a decrease of 5 per cent. from July, 30 per cent. from August, 1929, and 34 per cent. from August, 1928. Production of pneumatic casings amounted to 4,443,319 in August, an increase of 4 per cent. over July, but a decrease of 23 per cent. from August, 1929, and 41 per cent. from August, 1928. Inventories of pneumatic casings on hand August 31 totaled 11,570,885, a decrease of 8 per cent. from stocks on hand on July 31, and a decrease of 19 per cent. from August 31, 1929.

U. S. RUBBER PRODUCTION UP 22% IN SEPTEMBER

Detroit, Oct. 15.—A daily production schedule 22 per cent. greater than August was maintained during September by the tire department of the United States Rubber Company. It is planned at the present time to continue this same increased production schedule through October.

The increased production schedule is unusual at this time, states J. F. O'Shaughnessy, general manager, because tire production usually tapers off toward the end of August and is at a seasonal low ebb for the remaining months of the year.

H. H. WILCOX TO MANAGE INDIANAPOLIS FORD PLANT

Indianapolis, Ind., Oct. 15. — Harold H. Wilcox has taken over the management of the local plant of the Ford Motor Company, succeeding George P. Steinmetz, who resigned recently after serving in the local post for several years. Mr. Wilcox, who has been connected with the Ford company for nine years, comes here from Kansas City, Mo., where he was assistant branch manager.

TEN CARS IMPROVE RANKING IN SALES

(Continued from Page 1)

Whippet line was divided into two cars, the Whippet Four and the Willys Six. If these two cars were thrown together they would occupy tenth position, as compared with fourth place for Whippet in the first eight months of 1929.

In most instances, it will be noted, where the ranking of cars has droped the decline was only one place. A few exceptions, however, include Essex, Nash, Durant, Willys-Knight, Peerless, Viking, Jordon, Gardner and Windsor.

Following is the sales ranking of new pasenger cars in the United States in the first eight months of 1930, as compared with the ranking in the corresponding period of last year:

1930		1929
1	Ford	1
2	Chevrolet	2
3	Buick	6
4	Pontiac	5
5	Essex	3
6	Dodge	7
7	Plymouth	10
8	Chrysler	12
9	Studebaker	11
10	Oldsmobile	9
11	Nash	8
12	De Soto	15
13	Willys	*
14	Hudson	13
15	Graham	14
16	Packard	17
17	Hupomobile	18
18	Durant	16
19	Oakland	20
20	Whippet	4
21	Willys-Knight	19
22	Marmon	21
23	Auburn	22
24	La Salle	23
25	Reo	24
26	Cadillac	25
27	Franklin	26
28	Pierce-Arrow	28
29	Peerless	27
30	Lincoln	29
31	Austin	†
32	Viking	30
33	Cord	†
34	Jordan	32
35	Gardner	33
36	Windsor	34
37	Stutz	37

*Then the Whippet only.
†Not then on the market.

CRUDE OIL PRODUCTION AND IMPORTS DECLINE

New York, Oct. 15.—The American Petroleum Institute estimates that the daily average gross crude oil production in the United States, for the week ended October 11, 1930, was 2,366,800 barrels, as compared with 2,386,950 barrels for the preceding week, a decrease of 20,150 barrels. The daily average production east of California was 1,776,600 barrels, as compared with 1,800,750 barrels, a decrease of 24,150 barrels.

Imports of petroleum (crude and refined oils) at the principal United States ports for the week ended October 11 totaled 2,182,000 barrels, a daily average of 311,714 barrels, compared with 1,164,000 barrels, a daily average of 166,286 barrels for the week ended October 4 and a daily average of 267,821 barrels for the four weeks ended October 11.

MITCHELL SPRING CO. TO OPEN BRANCH PLANT

Newark, N. J., Oct. 15.—The Mitchell Spring Service Company of this city will open a branch plant in Dayton, O., where it has leased for five years the factory at 427 East 3d St. The local concern will establish manufacturing and service departments. It makes and installs automobile and truck springs.

ALUMINUM CO. ACQUIRES NEW BUILDING IN ALBANY

Albany, Oct. 15.—The Aluminum Company of America has doubled its office department here by taking over a new structure at State and Pearl Streets. From now on the firm will send its orders direct to its factories instead of through New York city, which is expected to increase the speed and efficiency of filling orders. Vincent C. Dodds is manager of the local headquarters, which serve the entire state east of Syracuse and also New England.

SPARKS *from* DETROIT

Outer Drives Save Time

* * *

Fay Faurote Keeps Busy

* * *

John Younger Speaks Up

Chris Sinsabaugh—Detroit Editor

EVEN in the bicycle days Chicago's boulevard system, over forty miles in length, and including most of the big parks, was the pride of the country so far as the cyclists were concerned. It was a giant thoroughfare for pleasure riding mainly and the bicycle clubs used to think it a good day's trip to swing around this huge circle. In fact, the first automobile road race, won by Charles E. Duryea in 1896, was run over this system.

It might well be said that the Chicago system furnished the idea that is now gaining strength in this automobile era of having an outer belt to take through traffic around the city, instead of through the business section, thus interfering with local traffic and clogging the main streets. Philadelphia has such a scheme and the through traffic follows Roosevelt Boulevard and City Line Road and avoids downtown.

Here in Detroit, we are at work on this sort of thing, and we learn of its progress in the twenty-fourth annual report of the Board of County Road Commissioners of Wayne county, Michigan, just off the press. Says Chairman Edward N. Hines:

"Notable progress has been made during the past year on the Outer Drive, our great circumferential highway. The Outer Drive is approximately forty-two miles long, encircling the city of Detroit and crossing all important east and west, north and south and radial arteries.

"It is being developed on a 150-foot width of right-of-way, which is the width of the present Grand Boulevard in Detroit. The Grand Boulevard is less than thirteen miles in length. The concrete pavement on over twenty miles of the Outer Drive is constructed and trees are being planted and ornamental boulevard lights are being installed."

* * *

FAY LEONE FAUROTE was one of the busiest of men at the S. A. E. production meeting in Detroit. As chairman of two committees, publicity and institutional history and museum, and a member of three others, grading, production and passenger car body, he is giving a lot of his time to the S. A. E., which he joined in 1911.

Few of the present generation realize that here is a real pioneer of the automobile industry, who can discuss other pioneers and say "I knew him when" and mean it. It is interesting to know that Mr. Faurote and Howard E. Coffin started together in the Olds Motor Works in 1902. Coffin and Faurote came from the University of Michigan, and Coffin was made experimental engineer and Faurote was his assistant. The latter, while with Olds, organized for the Y. M. C. A. what is believed to be the first school of motoring in the country, where automobile mechanics was taught to the young men of the time. He also wrote "How and Why of the Automobile," a textbook published in 1905.

Faurote eventually switched from engineering for Olds to become advertising manager of the company. He followed R. B. Jackson to Thomas and was its advertising manager, and when Jackson, Coffin and Roy Chapin formed the Thomas-Detroit Company, which preceded the organization of the Hudson Company by the trio, he went with them.

For ten years now, Faurote has been following aviation progress rather than automobiles and is a specialist on that subject now.

* * *

JOHN YOUNGER of the Ohio State University was one of the two speakers at the banquet of the S. A. E. production meeting in Detroit. Mr. Younger is now a professor at the university, specializing on machine design, but time was when he was most active in the automobile industry itself. It will be recalled that he was the engineer who brought out the first worm-drive truck in this country. This was when he was a Pierce-Arrow engineer, some seventeen or eighteen years ago.

COLUMBIA AUTO SERVICE HOST TO ITS STAFF

Union City, N. J., Oct. 15.—The staff of the Columbia Auto Service Company at 4388 Hudson Boulevard was treated to a chicken dinner by the management last night, to take the place of the annual outing, which was dispensed with this year. The employees and their wives, numbering about fifty, enjoyed a program that included dancing and singing.

MILWAUKEE CAR DEALERS FIND THEATER TIE-UPS AID IN BUILDING SALES VOLUME

THIS DRIVER HAD 'GOOD INTENTIONS'
—BUT ONLY HAD TWO WHEEL BRAKES—
SO HAS EDMUND LOWE in
'GOOD INTENTIONS'
AT THE TOWER THEATRE—SUNDAY
BAILEY MOTOR CO

A RECENT TIE-UP arranged between the Bailey Motor Car Company, Milwaukee Ford dealer, and the Tower Theater in that city, which attracted much attention

PROGRESSIVE automobile dealers have an excellent opportunity to tie up with theaters in their community as a means of publicizing their firms and products. A number of Milwaukee dealers have been successful in staging co-operative stunts with good results for both the theater and the automobile dealer.

A recent tie-up was arranged between the Tower Theater in Milwaukee and the Bailey Motor Car Company, Ford dealer. Two large placards were provided by the theater, which were affixed to the side of a truck carrying a wrecked car. The placard stressed the fact that the driver of the car "had 'Good Intentions,' but only had two-wheel brakes." The reader was admonished to see the new Ford models, equipped with four-wheel brakes, at the Bailey Motor Car Company.

Another tie-up was staged recently by a Milwaukee Austin dealer, at which time an Austin car was driven up to the box office of the theater and the patron alighted to purchase his tickets while the car remained parked in the outer lobby with a placard advertising the dealer's name.

The North Side Chevrolet Company had 3,000 placer cards printed, which it turned over to the theater for distribution. One side of these cards carried the automobile dealer's copy, while the other side carried the theater's advertisement. Reliable distribution was assured in this manner as well as reaching a class of people with a representative buying power, for the theater is one of the finest in this section of the city.

Certain pictures lend themselves better to automobile exploitation of this kind than others. In Janesville, for instance, a Studebaker dealer arranged to station an automobile in front of the theater with a sign on top of the car advertising the attraction. In various places around the automobile, cards were planted asking the public to guess how many miles the car would cover on the gasoline in the tank.

The rear wheels were jacked up and the car was filled with ten gallons of gas. An attendant gave out answer cards to the people entering the contest. Passes to the theater donated by the theater were given to the contest winners. The results were well worth while, for the dealer realized a number of excellent prospects through this tie-up.

The Van Drisse Motor Company of Green Bay also arranged for a clever tie-up with a theater in that city. A board was posted in the lobby of the theater carrying license numbers which, when identified, entitled the motorist to free gasoline. The Van Drisse concern, Green Bay Ford dealer, awarded twenty-five gallons of gasoline daily. The stunt not only placed its name before the public in an outstanding and unusual manner, but it also gave the concern an opportunity to secure prospective Ford buyers through the gas tie-up.

Limited Free Offer Found Incentive in Car Sales

BONNELL-MASON COMPANY
Recently Appointed
OAKLAND-PONTIAC DISTRIBUTORS
Announce their Opening
NO-FINANCE-CHARGE SALE of USED CARS

Oct. 4 to Oct. 11

SMALL DOWN PAYMENT—BALANCE IN ONE YEAR—NO FINANCE CHARGES—these three things make this, our first Used Car Sale, the most remarkable one this season.

"NO FINANCE CHARGES" means that you may save as much as $50 (or even more). Add to this the savings due to the fact that we have marked down every car below normal. Then remember that our reputation means absolute safety—every car guaranteed exactly as represented. For instance:

	Down Payment
1926 Peerless 80 Coach	$117.00
1928 Oldsmobile Landau Sedan	159.00
1928 Peerless Sedan, No. 80	242.00
1928 Peerless No. 69 7-Pass. Sedan	299.00
1929 Peerless Victoria De Luxe	312.00
1927 Nash Special Coach	114.00
1929 Peerless De Luxe Sedan	367.00
1927 Hupmobile Coach	149.00
1929 Oakland Cabriolet	267.00
1927 Buick Master Sedan	159.00
1928 Willys-Knight Sedan	184.00
1929 Dodge Sedan, Victory 6	167.00
1928 Pontiac Coach	142.00
1926 Nash Special Coach	49.00

Open Evenings Until 10 o'Clock

Also Open Sunday, Oct. 5, from 9 A. M. to 2.30 P. M.

BONNELL-MASON COMPANY
Oakland-Pontiac Distributors
Associated with
J. W. Mason & Sons, Peerless Distributors
360 Central Ave. (at Morris Ave.)

Increased sales of used cars during a week of intensive selling, with free financing charges as an incentive, is reported by Bonnell-Mason Company, recently appointed Oakland-Pontiac distributor in Newark, N. J. On all used cars sold during the week of October 4, small down payments were accepted, with the balance payable in a year.

Allows 20% Over Market For Stock in Used Car Sale

SENSATIONAL STARTLING OFFER

Read This!

Friday, Saturday and Sunday of This Week Only, Revoir Motors Will Accept as Payment or Part Payment on Any Reconditioned Used Car ANY AND ALL

Curb or Big Board Stocks at

20%

Above the Last Closing Price!

Think what this means to you—an opportunity to secure a fine reconditioned automobile of the make and model of your selection and at the same time cash in on your stocks at 20 per cent above their quoted value! We are confident of the soundness of business conditions at present and want to express our confidence in a dollars and cents way. ONLY BY CHARGING THE DIFFERENCE UP TO ADVERTISING COULD WE MAKE SUCH A STARTLING OFFER. You profit on any stock on the Curb or New York Stock Exchange. Study these figures—are for yourself how it works!

	CLOSING PRICE	OUR PRICE
Anaconda Copper	35¼	42⅜
Chrysler Motors	18¼	21⅞
Cities Service	24⅜	29¼
Curtis Wright	4⅜	5¼
Easy Washer	5	6
Fox Film	38⅜	46½
General Foods	51	61 1-5
General Electric	54⅜	65⅛
General Motors	36⅛	43⅜
Hudson Motors	22⅝	27⅛
Nash Motors	30⅜	36⅝
Niagara Hudson	12⅜	15⅛
Packard Motors	10⅛	12⅛
Sears, Roebuck	55⅛	66⅜
Standard Brands	16⅛	19⅜
Western Union	138½	166⅛
Woolworth	60½	72⅝

Never before has our stock of Used Cars been more varied or more complete. But act quickly—the best buys will not last long. If you're anxious to secure a good used car, here and now is your opportunity.

REVOIR MOTORS, Inc.
653 W. Genesee Street
Open Evenings and Sunday

Disposing of used cars through novel sales methods, has become a hobby with officials of Revoir Motors, Inc., Hudson-Essex distributor, with headquarters in Syracuse, N. Y. Taking advantage of the waning industrial depression throughout the country, this concern has come forward with an offer to accept as part payment, or full payment, on any reconditioned car in its salesroom, any and all stocks listed on the New York Stock Exchange or the New York Curb, at 20 per cent. above the last closing price. One of the firm's advertisements, reproduced above, depicts clearly the way in which the offer is put before the public.

MONTCLAIR MOTOR SALES IN NEW HEADQUARTERS

Montclair, N. J., Oct. 15.—Montclair Motor Sales Company, here dealer for Willys-Knight and Whippet automobiles, has moved from 195 Bloomfield Ave. to 302 Bloomfield Ave.

ELLIOTT-WILSON COMPANY EXPANDS DEPARTMENTS

Indianapolis, Ind., Oct. 15.—Expansion of all departments of the business of the Elliott-Wilson Motor Company, associate dealer for Dodge Brothers, was effected here when headquarters were transferred from the East Washington Street location, formerly occupied by the company, to Automobile Row, on Meridian Street.

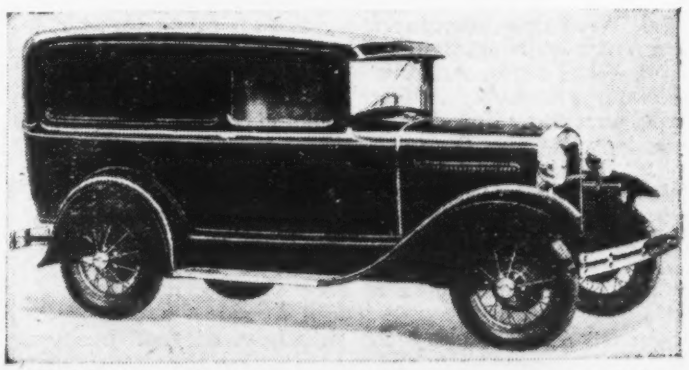
STEPHENS BUICK COMPANY OPENS USED CAR STORE

Minneapolis, Minn., Oct. 15 (UTPS).—Stephens Buick Company, which recently took over the retail Buick business of Pence Automobile Company, has opened a new used car store at 1016 Hennepin Ave.

INCREASES SCHEDULE

Bridgeport, Conn., Oct. 15.—Danbury Interurban Bus Company increased its schedule between here and Danbury, under authority granted by the Public Utilities Commission.

New Ford De Luxe Delivery



THE DE LUXE DELIVERY car just introduced by the Ford Motor Company is shown above. This car, mounted on the Model A chassis, is designed for use by exclusive shops, florists and other tradesmen desiring distinctiveness in their delivery service

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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Member A. B. C.

THURSDAY, OCTOBER 16, 1930

ADVERTISING AND BUSINESS HEADQUARTERS
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Preventable Loss

DURING the year 1929 there were 57,280 business failures and yet this was a year of rather abnormal prosperity for ten months of the twelve. This rather astonishing list of failures caused the wiping off of the books of approximately $800,000,000, from which it may be surmised that business failures constitute a very important economic factor in the life of this nation. Furthermore, this matter of business failure is not an academic question, but something for which all of us must pay a pro rata share. A definite loss of this kind falls not on the creditor and debtor, but in the final analysis gets into the cost of commodities upon which the entire nation is dependent.

In a recent issue of the American Magazine Prof. W. O. Douglas of the Yale law school was quoted in some extremely interesting analyses. Prof. Douglas holds that there are six major causes of business failures, the first in importance being lack of proper bookkeeping. Next he places the blame on negligence or inability to apply the facts disclosed by the accounting department to the conduct of the business. His third class is the diverting of funds from the business to speculation or extravagant living. Then come the granting of unwise or too much credit, the accepting of too much credit, running into heavier debt than prospects justify and finally to errors in judgment.

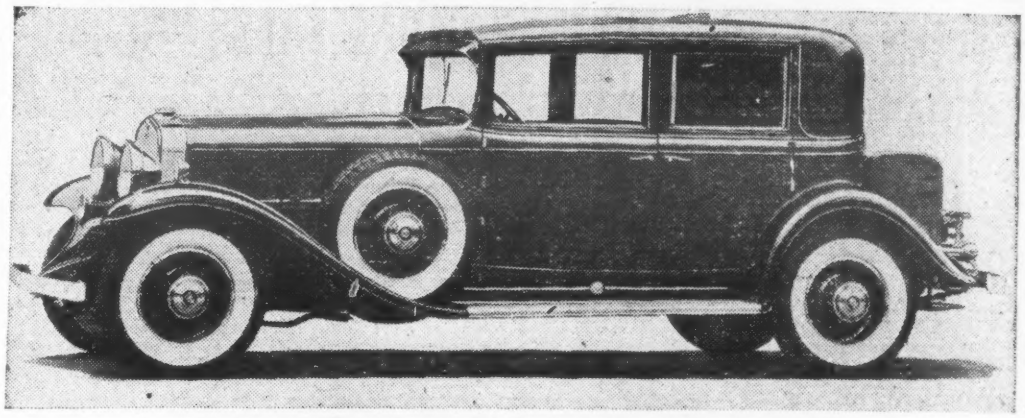
Now, errors in judgment are something to which every human being is prone. Sometimes a perfectly correct judgment is vitiated by later developments completely outside the business man's sphere of influence. But the other five causes of business failures—and Prof. Douglas lists them as being of greater importance than errors in judgment—are usually under the control of any business man. Obviously there is a chance for errors of judgment in granting or accepting credit; there is a possibility that a sudden change in business conditions might make what was originally a wise credit operation a cause of failure, but in the main bankruptcies from the first five causes are preventable.

Prof. Douglas next proceeds with his analysis and submits a list of ten questions which he contends any man should be able to answer regarding his business at all times. The ten questions follow:

1. What salary are you paying yourself?
2. What were your family expenses last year?
3. Is your salary more or less than the profits of your business last year?
4. What was your net profit last year, and how much of it did you put into a reserve or surplus against the possibility of unexpected increases in overhead, such as rent, or to cover inventory deflation or other unforseen contingencies?
5. What proportion of your sales are on credit?
6. What were your net losses on credit sales last year?
7. What common figure do you accept as the average net loss on credit sales in your line of business?
8. What does your inventory show? (That is, what is the average value of the amount of stock you carry?)
9. What common figure do you accept as representing the average turnover in your line of business? (In other words, how many times did you sell and completely replenish your stock last year?)
10. What is the total amount of assets invested in your business? (That is to say, if you figure your original capital, together with all sums subsequently invested, less depreciation of assets, or plus appreciation, you will then be able to determine your percentage of profit on your investment. Are your books in such shape that you can do this?)

In our own industry the principles of good business management are better understood today than they were even a year or so ago. Nevertheless we recommend an earnest perusal of Prof. Douglas' pertinent questions to all our readers.

More Views of the Cadillac V-12

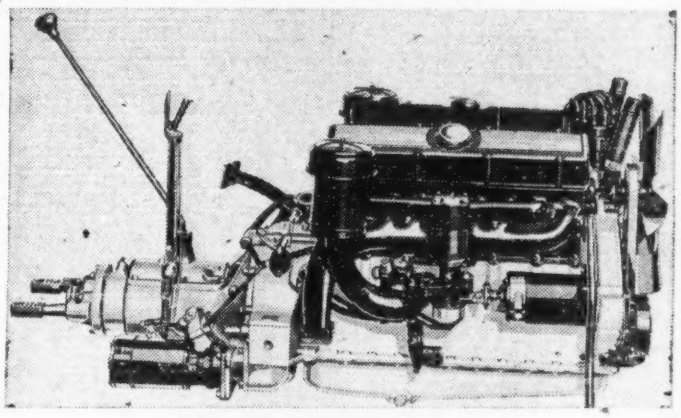


CADILLAC V-12 5-passenger Town Sedan

THE new 12-cylinder Cadillac, built on 140 and 143 inch wheel bases and powered by an engine comparable in design and performance to that of the Cadillac V-16, will be displayed October 18 in dealers' showrooms throughout the country.

Factory prices on the new Cadillac V-12 range from $3,795 for the two-passenger coupe to $4,895 for the all weather phaeton.

The bore and stroke differ, however, being 3⅛ by 4. There are four steel-backed babbitt main bearings. Engine lubrication is by pressure to all bearing surfaces. Crankcase ventilation is identical with the V-16, even to the air cleaner and thermostat on the intake.



SIDE VIEW of Cadillac V-12 engine

HARTOL PRODUCTS CORP. EXPANDS ITS MARKETING FACILITIES IN EAST

Elizabeth, N. J., Oct. 15.—Owing to the rapid growth of its business, and the resultant urgent need for increased storage facilities, it was learned Saturday that negotiations were recently completed whereby the large storage, deep water terminals and oil blending facilities of the Galena Signal Oil Company at Bayway were being used by the Hartol Products Corporation and added to that organization's extensive facilities for the marketing of petroleum products in New York, New Jersey and New England.

Hartol Products Corporation reputed to be one of the largest marketers of gasoline in spot tank cars in the East, has another plant at Woburn, Mass., for the storage of various solvents, gasoline and lubricants which are marketed in that area, as well as a storage plant at Harrison, for distribution of its branded lubricant oil.

The Bayway plant was built by the Galena Signal Oil Company and is equipped with twenty tanks, of various sizes, with a total storage capacity of 15,000,000 gallons. This terminal will enable the Hartol interests to bring in oil from the Gulf or the West Coast, as well as to permit direct exporting from the plant with a minimum of handling, as it is located on a channel thirty-two feet deep.

FRANK MARTZ BUYS BLUE BUS LINES

Binghamton, N. Y., Oct. 15.—The Blue Bus Lines of 47 Henry St., this city, has been taken over by the Frank Martz Coach Lines of Wilkes-Barre, Pa. The same service will be furnished the public with a through service between here and Wilkes-Barre, operating a scheduled run of six trips daily. The Martz line will make connections at Scranton for all points east and west.

NEW TRANSFER SYSTEM FOR VIRGINIA CONCERN

Richmond, Va., Oct. 15.—A new transfer system is in operation on the buses and street cars of the Virginia Electric and Power Company, and is reported by company officials to be working successfully. The new system does away with the old method of punching each transfer for time and direction and substitutes for the punch a metal board which is fastened on the bus or street car near the hand of the operator.

New Dealers Appointed

NEW YORK

Studebaker—Carpet City Motor Sales, Amsterdam; Motor Sales Corporation of Schenectady, Schenectady; Perry Garage, Perry; Samuel Corelli, Gowanda; C. W. Baker's Garage, Sherburne.

Hupp—Cortland Auto Sales, Cortland; Strassle Brothers, Freeport, Long Island; Beyer Motor Company, Inc., Newburgh; Southern Boulevard Hupmobile Company, New York; Peck & Mangon, New York.

Marmon-Roosevelt — Roscoe C. Allen, Seneca Falls.

Graham-Paige — Louis Keller, Inc., Corona.

NORTH DAKOTA

Studebaker—Blaisdell Motor Company, Minot.

OHIO

Studebaker — The K. E. Harvey Motor Company, Cleveland; Harold O. Hamilton, West Alexandria; Wilson B. Downing, Bellefontaine.

Hupp — Lindsey Motor Sales, Bryan; Fred H. Sosman, Jr., Tiffin; Albert S. Carr Motor Company, Warren.

OREGON

Studebaker — Walter W. Metzger, Inc., Gresham; P. J. Rooney Auto Company, Marshfield.

Hupp — Dulmage Motors (distributor), Portland.

PENNSYLVANIA

Studebaker — The Kirby-Davis Company, Inc., Kingston; C. B. Brown, Saltsburg; Central Garage, Albion.

Hupp — A. M. Harting, Ephrata; Central Garage, Pen Argyl; R. E. Parker, Upper Darby; Harold J. Kline, Bloomsburg.

Graham-Paige — Miller Motor Sales, Mount Jewett.

RHODE ISLAND

Hupp — Richard V. Taylor, Inc., East Providence.

VIRGINIA

Studebaker—W. P. Light, Portsmouth.

Hupp—Frank Goode Motor Company, Harrisburg.

WASHINGTON

Studebaker—Sands Motors Company, Bremerton; Harold A. Allen (distributor), Tacoma.

WEST VIRGINIA

Studebaker — M. R. McMillion, McComas; Hennen Motor Company, Mannington.

WYOMING

Hupp—Miller Motor Company, Cheyenne.

WISCONSIN

Studebaker — Goessling Motors, Inc., Janesville; John P. Obenberger, Elm Grove.

Hupp—Larson Quinn Company, Ellsworth.

FREE REPAIR INSTRUCTION SPONSORED IN ST. LOUIS

St. Louis, Oct. 15 (UTPS).—Free instruction in the modern methods of repairing fenders and bodies will be given Friday evening at the David Ranken School of Mechanical Trades. Alvin R. Tom of the Fairmount Tool and Forging Company, Cleveland, will demonstrate. The demonstration is being held under the auspices of the Campbell Auto Supply Company, Fleer-Pretty Auto Supply Company, Beck & Corbitt Company, Koochook Company, Sligo Iron Stove Company and Campbell Iron Company.

COMING EVENTS

OCTOBER

11-26—**Dallas, Tex.** Southwestern Automobile show.
15-17—**Washington, D. C.** Society of Industrial Engineers' convention.
16-25—**London, England.** Olympia Motor Show.
20-22—**Atlantic City, N. J.** National Hardware Association convention.
20-24—**Atlantic City, N. J.** Middle Atlantic Automotive Jobbers' Association convention.
22-23—**New York.** Steel Founders' Society of America, Inc., meeting at Hotel Roosevelt.
22-24—**Pittsburgh, Pa.** Society of Automotive Engineers transportation meeting.

NOVEMBER

3- 6—**Chicago, Ill.** National Tire Dealers Association convention.
7- 8—**Cleveland.** National Battery Manufacturers Association meeting at Hollenden Hotel.
6-16—**Berlin, Germany.** International Automobile Show.
8-15—**Chicago, Ill.** Automobile Salon at Drake Hotel.
13-19—**Cleveland, O.** Motor and Equipment Association and National Standard Parts Association, Joint Show.
13-23—**Paris, France.** Commercial Vehicle Salon.
14-15—**Los Angeles.** Western Motor Clubs conference.

DECEMBER

6-17—**Brussels, Belgium.** Automobile Exhibition.

JANUARY

3-10—**New York.** National Automobile Show.
8—**New York City.** Society of Automotive Engineers' annual dinner.
10-16—**St. Louis, Mo.** National Roadbuilders' show and convention.
17-24—**Detroit, Mich.** Annual Show, Convention Hall.
17-24—**Baltimore, Md.** Automobile Show.
19-23—**Detroit, Mich.** Society of Automotive Engineers' annual meeting.
24-31—**Chicago, Ill.** National Automobile Show.

EIGHT GREAT FEATURES
PLACE BUICK DEALERS IN THE LEAD
WITH

the 8 as BUICK builds it

The phenomenal success of Buick's four great Eights in four price ranges—with the resultant benefits to all Buick Dealers—can be directly traced to the outstanding features of the new Buick Eight itself.

Here are a few important advantages Buick Dealers enjoy with The Eight as Buick Builds It . . . advantages not combined in any other automobile:

1. Masterly New Valve-in-Head Straight Eight Engines.
2. New Engine-Oil Temperature Regulator.
3. New Non-Clash Syncro-Mesh Transmission.
4. New Dual Carburetion.
5. New Insulated Bodies by Fisher.
6. New Air Intake Silencer.
7. New Low Prices (one series of Straight Eights listing even below the Buick Six).
8. Built by Buick—straight eight manufacturer *exclusively*—and winner of more than twice as many buyers as any other maker of fine cars.

There may be a Buick franchise open in your community—a sales opportunity with The Eight as Buick Builds It. Write—or wire—today for further facts.

FOUR SERIES

$1025 TO $1095	STRAIGHT 8	$1535 TO $1565
$1285 TO $1355		$1610 TO $2035

ALL PRICES F.O.B. FACTORY

ALL VALVE-IN-HEAD

BUICK MOTOR COMPANY, FLINT, MICHIGAN

Division of General Motors Corporation

CANADIAN FACTORIES: McLAUGHLIN-BUICK, OSHAWA, ONTARIO

Buick

WHEN BETTER AUTOMOBILES ARE BUILT . . . BUICK WILL BUILD THEM

MOTOR PRODUCTS CORP. EARNS $3.13 A SHARE

Detroit, Oct. 15.—Motor Products Corporation reports for nine months ended September 30, 1930, net profit of $617,293 after depreciation and Federal taxes, equivalent to $3.13 a share on 197,366 no-par shares of common stock. This compares with $2,200,017 in first nine months of 1929, equal after dividend requirements on preferred stock then outstanding, to $10.85 a share on common. The preferred stock was called for redemption on May 18, 1929.

Net profit for quarter ended September 30, amounted to $15,054 after above charges, equal to eight cents a share, comparing with $370,220 or $1.87 a share in preceding quarter and $470,586 or $2.38 a share in third quarter of previous year.

OTHER FINANCIAL NEWS

NOBLITT-SPARKS

Noblitt-Sparks Industries, Inc., for nine months ended September 30, 1930, reports net profit of $402,721 after charges, depreciation and Federal taxes, equivalent to $5.14 a share on 78,326 no-par shares of stock. This compares with $489,673, or $8.16 a share, on 60,000 shares in the first nine months of 1929.

September net profit was $109,363 after above charges, against $153,459 in September, 1929.

PARAMOUNT CAB

Paramount Cab Manufacturing Corporation and subsidiaries report for year ended September 30, 1930, net loss of $280,912 after depreciation, interest, etc. In preceding year net profit after Federal taxes, was $1,115,981, or $4.46 a share, on 250,000 common shares then outstanding.

The loss was due mainly to the general business depression which has materially affected taxicab ridding. Reductions overhead, however, have been obtained that should make for a better showing during the first quarter now in progress.

ELECTRIC AUTO-LITE

C. O. Miniger, president of Electric Auto-Lite Company, said: "Preliminary figures on operations during the third quarter of this year confirm previous estimates that earnings for the quarter were sufficient to show the dividend requirements of $4.50 for the first nine months completely earned after all charges. Business has been gaining since the mid-summer slackness with substantial recoveries in profits indicated in the final two months of the quarter as contrasted with the low point in July.

"On the basis of releases for the final quarter of the year, the company will earn in excess of its dividend requirements for the period.

"The company has added three new contracts recently. Its subsidiary, USL Battery Corporation, is enjoying a substantial volume of business and the earnings of that division in September were 26 per cent. in excess of September, 1929."

In the first six months of 1930, Electric Auto-Lite reported earnings of $3,364,839 after extraordinary charges of $368,890 but before Federal taxes.

THERMOID COMPANY

R. J. Stokes, president of Thermoid Company, in letter to stockholders announcing declaration of regular quarterly dividend of $1.75 on the preferred stock, payable November 1 to stock of record October 15, states:—

"Despite the general business depression, sales of Thermoid Company since the turn of the half year have been progressing satisfactorily. While our volume of business has declined as compared with a year ago, the company, according to preliminary figures, shows a profit for the third quarter available for its preferred and common stocks, after deductions for interest, depreciation, etc. Business thus far in October for Thermoid and its subsidiaries looks better than it has for the past several months."

TRIPLEX SAFETY GLASS

Lieut.-Col. O. C. Clare, chairman of Triplex Safety Glass Company, at the annual meeting of stockholders in London, stated that economies which have been put into effect in the King's Norton factory have resulted in a profit as compared with a loss a year ago. Cable advices state that its American company's business is progressing satisfactorily, and despite slump in business, the anticipated profit will be larger than last year.

TIDEWATER OIL SALES TAKES TEN-YEAR LEASE

Chatham, N. J., Oct. 15.—The Tidewater Oil Sales Corporation has leased for ten years, with purchase option, a service station at the northeast corner of Main Street and Hedges Avenue, Chatham, on a plot 150 feet square.

CURRENT PRICES OF PASSENGER CAR MODELS

AUBURN—6-85. 120 W. B.

Sport Sedan	995	Sedan	1,095
Cabriolet	1,095		

AUBURN—8-95. 125 W. B.

Sport Sedan	1,195	Cabriolet	1,295
Sedan	1,295	Phaeton Sedan	1,395

AUBURN—8-125. 130 W. B.

Sport Sedan	1,495	Cabriolet	1,595
Sedan	1,595	Phaeton Sedan	1,695

AUSTIN—4-cyl. 75 W. B.

2 Coupe	445	2 Roadster	445

BUICK—8-cyl. 114 W. B.

2 Bus. Coupe	1,025	5 Phaeton	1,055
5 2-dr. Sedan	1,035	2 Spt. Coupe	1,055
4 Spt. Roadster	1,055	5 4-dr. Sedan	1,095

BUICK—8-cyl. 118 W. B.

2 Bus. Coupe	1,285	5 Phaeton	1,335
2 Spt. Coupe	1,325	4 Spt. Roadster	1,335
		5 4-dr. Sedan	1,355

BUICK—8-cyl. 124 W. B.

4 Coupe	1,535	5 4-dr. Sedan	1,585

BUICK—8-cyl. 132 W. B.

4 Spt. Roadster	1,610	5 4-dr. Sedan	1,785
7 Touring	1,620	7 4-dr. Sedan	1,935
2 Spt. Coupe	1,720	7 Lim. Sedan	2,035
5 Coupe	1,765		

CADILLAC—8-cyl. *210. Fisher Custom.

2 Coupe	2,695	2 Con. Coupe	2,945
5 Coupe	2,795	7 Sedan	2,945
5 Sedan	2,795	7 Imp. Sedan	3,095
5 Town Sedan	2,845		

CADILLAC—8-cyl. *210. Fleetwood Custom.

2 Roadster	2,845	5 Sedanette	4,595
5 A.W.Phaeton	3,795	7 Imperial	4,595
5 Sedan	4,195	Town Cabriolet	4,995
5 Sedan Cabrio	4,245	Town Cabriolet	5,145
7 Sedan	4,295	Lim. Brougham	5,145
5 Imperial	4,395		
8 Imp. Cabrio.	4,445		
5 Sedanette Cabriolet	4,500		

CADILLAC—V-12. 140 W. B.

2 Coupe	3,795	Con. Coupe	4,045
5 Coupe	3,895	7 Sedan (143	
5 Sedan	3,895	(W. B.)	4,195
Roadster	3,945	7 Imperial Sedan	
5 Town Sedan	3,945	(143 W. B.)	4,345
Phaeton	4,045	A. W. Phaeton	4,895

CADILLAC—V-16. 148 W. B. Fleetwood Custom.

2 Roadster	5,350	Town Cabriolet	
2 Coupe	5,800	(Leather)	7,150
2 Con. Coupe	5,900	Lim. Brougham	7,150
5 Club Sedan	5,950	7 Sedan	7,225
5 Sedan	5,950	5 Imperial	7,300
5 Sedan Cabrio.	6,125	5 Imp. Cabriolet	7,350
5 Phaeton	6,150	A. W. Phaeton	7,350
7 Sedan	6,225	7 Imp. Sedan	7,525
5 Imperial	6,300	Town Cabriolet	
5 Imp. Cabrio.	6,350	(Opera seats)	8,750
7 Imp. Sedan	6,525	Town Cabriolet	
A. W. Phaeton	6,650	(quarter windows)	8,750
2 Coupe	6,850		
2 Con. Coupe	6,900	Town Cabriolet	
5 Club Sedan	6,950	(leather quarters)	8,750
5 Sedan	6,950		
Town Cabriolet	7,000	Lim. Brougham	8,750
5 Sedan Cabrio.	7,125	Town Brougham	9,700
Town Cabriolet	7,150	Town Brougham	9,700

CHEVROLET—6-cyl. 107 W. B.

Roadster	495	Sport Coupe	615
Phaeton	495	Club Sedan	625
Sport Roadster	515	Sedan	675
Coach	565	Special Sedan	685
Coupe	595		

CHRYSLER—"6." 6-cyl. *169¼

Business Coupe	745	Touring	785
Royal Coupe	765	4-dr. Sedan	795
Roadster (RS)	785	Con. Coupe	875

CHRYSLER—66. 8-cyl. *163¼

2 Business Coupe	995	Roadster (RS)	1,025
5 Brougham	995	Royal Coupe (RS)	1,075
5 Phaeton	1,025	Royal Sedan	1,095

CHRYSLER—70. 6-cyl. *168½

2 Bus. Coupe	1,245	Royal Coupe (RS)	1,295
5 Brougham	1,245	Royal Sedan	1,295
5 Phaeton	1,295	2-4 Roads'r (RS)	1,345
		Con. Coupe (RS)	1,545

CHRYSLER—8-cyl. *186½

2-4 Roadster	1,495	5 Royal Sedan	
2-4 Royal Coupe (Standard)	1,495	(Special) Sport Roadster	1,565
5 Royal Sedan (Standard)	1,525	(6 wire whls) 2-4 Con. Coupe	1,595 1,665
2-4 Royal Coupe (Special)	1,535		

CHRYSLER—Imperial 8-cyl. *210¾

5 Sedan	2,495	7 Sedan	2,695
5 Sedan (C C)	2,595		

CORD—8-cyl. 137½ W. B.

Sedan	3,095	Cabriolet	3,295
Brougham	3,095	Phaeton Sedan	3,295

DE SOTO—6-cyl. *168⅛

2-4 Roadster (RS)	810	5 4-dr. Sedan	875
5 Touring	830	2-4 Con. Coupe	
2 Coupe	830	(RS)	945
2-4 Coupe (RS)	860		

DE SOTO—8-cyl. *177

5 Business Coupe	965	5 Touring	1,035
2-4 Roadster (RS)	985	5 De L. Sedan	1,065
5 Stand. Sedan	995	2-4 Con. Coupe	
2-4 De L. Coupe (RS)	1,025	(RS)	1,075

DODGE—Six. *168⅝

2 Business Coupe	735	5 4-dr. Sedan	765
2-4 Stan. Coupe (RS)	755	5 4-dr. Phaeton	775
2-4 Roadster	755	2-4 Con. Coupe (RS)	835

DODGE—Eight. *1567⅛

2-4 Roadster (RS)	995	5 Sedan	1,045
2-4 Stan. Coupe (RS)	1,025	2-4 Con. Coupe (RS)	1,095

DURANT—4-cyl. 112 W. B.

Coach	675	Coupe	695
4-dr. Sedan	695		

DURANT—6-11. 6-cyl. *172¼ (Three Speed Transmission)

4-dr. Coach	725	*De L. Roadster	935
Business Coupe	785	*De L. Coupe	945
Stan. Coup (RS)	815	*De L. Phaeton	960
Stan. Sedan	845	*De L. Sedan	975

*Six wire wheels.

DURANT—6-17. 6-cyl. *175¾ (Four Speed Transmission)

Business Coupe	995	*De L. Coupe	1,155
Stan. Coupe (R. S.)	1,025	*De L. Roadster	1,155
Stan. Sedan	1,065	*De L. Phaeton	1,185
		*De L. Sedan	1,195

*Six wire wheels.

ELCAR—75-A. 6-cyl. 117 W. B.

2 Roadster	995	4 Con. Landau	1,265
4 Roadster	1,245	5 Club Sedan	1,295
2 Coupe	1,245	5 Sedan	1,295
4 Coupe	1,265		

ELCAR—85. 8-cyl. 123 W. B.

2 Roadster	1,395	4 Con. Landau	1,565
4 Roadster	1,535	5 Club Sedan	1,595
2 Coupe	1,545	5 Sedan	1,595
4 Coupe	1,565		

ELCAR—86. 8-cyl. 123 W. B.

4 Roadster	1,635	5 Club Sedan	1,695
2 Coupe	1,645	4 Fleetwing Sed.	1,695
4 Con. Landau	1,665	5 Princess Sed.	1,695
4 Coupe	1,665		

ELCAR—130. 8-cyl. 130 W. B.

2 Coupe	1,845	4 Con. Landau	1,995
5 Sedan	1,995	4 Roadster	1,995
5 Club Sedan	1,995	5 Touring	1,995
4 Coupe	1,995	7 Sedan	2,120

ELCAR—120. 8-cyl. 127 W. B.

5 Touring	2,465	7 Sedan	2,645
5 Sedan	2,465		

ELCAR—140. 8-cyl. 135 W. B.

4 Roadster	2,645	5 Sedan	2,645
4 Con. Landau	2,645	5 Con. Sedan	2,750

ESSEX—6-cyl. 113 W. B.

2 Coupe	650	Sun Sedan	695
Coach	650	Standard Sedan	715
Coach (RS)	685	Touring Sedan	775
Roadster	695	Brougham	795

FORD—Model A. 4-cyl. 103½ W. B.

Pickup Op. Cab.	425	De Luxe Coupe	545
Roadster	435	Standard Sedan	
Phaeton	440	(3 win.)	600
Pickup Cl. Cab.	455	De Luxe Phaeton	625
Tudor Sedan	495	Cabriolet	625
Coupe	495	4-dr. De Luxe Sedan (2 win.)	640
De L Roadster	520		
Sport Coupe	525	Town Sedan	660

FRANKLIN—Series 115. 125 W. B.

Sedan	2,395	Vic. Brougham	2,695
Coupe	2,610	Conv. Coupe	2,710
De Luxe Sedan	2,670	Town Sedan	2,725
Club Sedan	2,675	Pursuit	2,750

FRANKLIN—Series 147. 132 W. B.

Salon Special	2,715	Limousine	3,070
7 Sedan	2,875	Sedan Lim	3,125
Roadster	2,885	Speedster (5 wire	
5 Pirate Tour.	2,885	wheels)	3,425
7 Pirate Phaet.	2,970		

FRANKLIN—Custom. 132 W. B.

Dietrich Con. Speedster	3,725	Holbrook-Avion Sedan	6,300
*Deuville Sed.	5,100	*Locke Con Sed.	7,600
Dietrich Town Car (wood wheels)	5,200	*Dietrich Pirate Coupe	8,300
Derham Cabriol.	6,100		

*Wire wheels.

GARDNER—Model 150. 130 W. B.

Sport Sedan	1,945	Coupe	1,995
Brougham	1,995	Sedan	2,045
Roadster	1,995		

GARDNER—Model 148. 125 W. B.

Roadster	1,795	Sport Phaeton	1,845
Brougham	1,795	Sedan	1,845
Sport Sedan	1,795		

GARDNER—Model 136. 122 W. B.

Sport Sedan	1,195	Brougham	1,245
Coupe	1,245	Roadster	1,245

GRAHAM—6-cyl. Standard. 115 W. B.

5 Town Sedan	845	DeL. Town Sedan	945
2 De L. Coupe	895	5 DeL. Sedan	995
5 Univ. Sedan	895	2 Roadster (RS)	995
5 Sedan Coach	895	5 Phaeton	1,015
2 De L. Coupe (R S)	945	2-4 Spt. Coupe (R. S)	1,045

GRAHAM—6-cyl. Special. 115 W. B.

2 Bus. Coupe	1,195	5 Sedan	1,225
2 Coupe (RS)	1,225		

GRAHAM—8-cyl. Standard. 122 W. B.

2 Coupe (RS)	1,445	5 Conv. Sedan	1,985
5 Sedan	1,445		

GRAHAM—8-cyl. Special. 122 W. B.

2 Coupe (RS)	1,595	5 Conv. Sedan	2,085
5 Sedan	1,595		

GRAHAM—8-cyl. Standard. 134 W. B.

5 Sedan	1,695	7 Limousine	1,945
7 Sedan	1,745		

GRAHAM—8-cyl. Custom. 127 W. B.

5 Sedan	2,025	2 Cabriolet (RS)	2,245
4 Coupe	2,025	5 Phaeton	2,295
2 Coupe (RS)	2,225		

GRAHAM—Special 8. 134 W. B.

5 Sedan	1,795	7 Limousine	2,045
7 Sedan	1,845		

GRAHAM—8-cyl. Custom. 137 W. B.

7 Phaeton	2,295	7 LeBaron Limo.	
5 Sedan	2,455	Sedan	3,940
5 Town Sedan	2,455	7 LeB. Twn Car	4,255
7 Sedan	2,525	7 LeB. Lim'sine	4,505

HUDSON—8-cyl. 119 W. B.

Coupe	885	Stan. Sedan	1,025
Coach	895	Sun Sedan	1,045
Coupe (RS)	925	5 Phaeton	1,300
Roadster	995		

HUDSON—8-cyl. 126 W. B.

Touring Sedan	1,145	7 Sedan	1,295
Brougham	1,195	7 Phaeton	1,500

HUPMOBILE—Century 6-cyl. 114 W. B.

2 Com. Coupe	1,145	4 Cabriolet	1,250
5 4-dr. Sedan	1,195	5 Phaeton	1,250
4 Coupe (RS)	1,195	4 Roadster	1,275

HUPMOBILE—Century 8-cyl. 118 W. B.

2 Com. Coupe	1,345	4 Con. Cabriolet	1,450
4 Coupe (RS)	1,395	5 Phaeton	1,450
5 Sedan	1,395	4 Roadster	1,475

HUPMOBILE—Ser. C. Standard. 121 W. B.

5 4-dr. Sedan	1,695	7 Phaeton (5 disc wheels)	1,785
4 Coupe (RS)	1,695		
5 Vic. Coupe	1,715	5 Town Sedan (5 disc wheels)	1,805
4 Cabriolet	1,770		

HUPMOBILE—Series H. Standard. 125 W. B.

5 4-dr. Sedan	2,020	7 Phaeton (5 disc wheels)	2,190
4 Coupe (RS)	2,080		
5 Vic. Coupe	2,100	5 Town Sedan (5 disc wheels)	2,190
4 Cabriolet (RS)	2,155		

HUPMOBILE—Series U. 137 W. B.

7 Sedan	2,495	7 Limousine	2,645

JORDAN—Standard 80. 120 W. B.

5 Sedan	1,795	Coupe	1,795

JORDAN—Great 90. 8-cyl. 125 W. B.

5 Sedan	2,295	Playboy Roadst.	2,595
Stand. Coupe	2,295	Speedboy Sport Conv. Coupe	2,495
Phaeton	2,795	Sport Sedan	2,595

JORDAN—Great 90. 8-cyl. 131 W. B.

7 Touring	2,495	7 Sedan Limo.	2,695
7 Sedan	2,595		

LA SALLE—8-cyl. *201. Fisher Custom.

2 Coupe	2,195	5 Town Sedan	2,345
5 Sedan	2,295	7 Sedan	2,475
2 Con. Coupe	2,295	7 Imp. Sedan	2,595
5 Coupe	2,295		

LA SALLE—8-cyl. *201. Fleetwood Custom.

2 Roadster	2,245	5 Sedan Cabrio.	3,245
7 Touring	2,345	5 Sedanette	3,245
5 Phaeton	2,385	5 Phaeton	3,245

LINCOLN—8-cyl. 136 W. B.

7 Spt. Touring	4,200	Town Sedan (2 windows)	4,400
4 Spt. Phaeton	4,200		
4 Spt. Phaet. (touneau cowl and windshield)	4,400	Town Sedan (3 windows)	4,400
2 Club Roadster	4,400	5 Sedan	4,500
5 Coupe	4,400	7 Sedan	4,700
		7 Limousine	4,900

LINCOLN—8-cyl. Custom. 136 W. B.

Conv. Roadster (Le Baron)	4,500	7 Cabriolet (N. C. A. W.) by Le Baron	6,900
4 Coupe (Judkins)	5,000	7 Brougham (A. W.) Brunn	7,000
4 Coupe Sedan (Le Baron)	5,300	7 Cabriolet (S. C. A. W.) Le Baron	7,100
Berline (2 win.) (Judkins)	5,600	7 Cabriolet (A. W. non or semi-col.) Brunn	7,200
Berline (3 win.) (Judkins)	5,600	7 Cabriolet (fully collapsible) by Le Baron	7,200
7 Limousine (Willoughby)	5,900		
4 Conv. Coupe (Dietrich)	6,200		
4 Conv. Sedan (Dietrich)	6,600		

MARMON—Roosevelt. 8-cyl. *172

2 Coupe (RS)	930	Conv. Coupe (RS)	995
5 Sedan	885		
4 Vic. Coupe	995		

MARMON—8-69. *180

2 Coupe (RS)	1,495	5 Phaeton	1,610
5 Sedan	1,520	2 Convertible Coupe (RS)	1,610
5 4-dr. Brough.	1,565		
5 4-dr. Clb Sed.	1,565		

MARMON—8-79. *191

2 Coupe (RS)	1,995	5 4-dr. Club Sed.	2,070
5 Sedan	2,020	2 Convertible Coupe (RS)	2,120
5 Phaeton	2,020		
5 4-dr. Brough.	2,070		

MARMON—Big Eight. *202

5 Sedan	2,720	7 Sedan	2,920
5 4-dr. Brough.	2,770	7 Sedan Lim.	3,120
5 4-dr. Clb Sed.	2,770	7 Touring	3,170
2 Coupe (RS)	2,850		

De luxe equipment can be had on the Marmon at a moderate additional cost.

NASH—"600." 6-cyl. 111¼ W. B.

Coupe	795	4-dr. Sedan	845
2-dr. Sedan	795	Touring	895
Coupe (RS)	825		

NASH—"870." 8-cyl. 116¼ W. B.

Coupe	945	Coupe (RS)	975
4-dr. Spec. Sedan	955	4-dr. Sedan	995

(Recent price changes in bold face)

NASH—"880." 8-cyl. 121 W. B.

Coupe	1,245	4-dr. Sedan	1,295
Coupe (RS)	1,285	4-dr. Town Sed.	1,375

NASH—"890." 8-cyl. 133 W. B.

4-dr. Sedan (124 W.B.)	1,565	Victoria	1,765
Coupe	1,695	Ambassador	1,825
Cabriolet	1,695	7 Sedan	1,925
Coupe (RS)	1,745	7 Limousine	2,025

OAKLAND—8-cyl. 117 W. B.

Roadster	895	4-dr. Sedan	995
Coupe	895	Custom Sedan	1,045
5 2-dr. Sedan	895	5 Phaeton	1,075
Sport Coupe	965		

OLDSMOBILE—6-cyl. Standard. 113½ W.B.

2-dr. Sedan	895	4-dr. Sedan	995
Coupe	895	Con. Roadster	995
Sport Coupe	965	Pat. Sedan	1,060
Phaeton	965		

OLDSMOBILE—6-cyl. Special. 113½ W. B.

2-dr. Sedan	970	4-dr. Sedan	1,070
Coupe	970	Con. Roadster	1,070
Sport Coupe	1,040	Pat. Sedan	1,135
Phaeton	1,040		

OLDSMOBILE—6-cyl. De Luxe. 113½ W.B.

2-dr. Sedan	1,025	4-dr. Sedan	1,125
Coupe	1,025	Con. Roadster	1,125
Sport Coupe	1,095	Pat. Sedan	1,190
Phaeton	1,095		

OLDSMOBILE—6-cyl. 113½ W. B.

(5 Wire wheel equipment)

2-dr. Sedan	950	4-dr. Sedan	1,050
Coupe	950	Con. Roadster	1,050
Sport Coupe	1,020	Pat. Sedan	1,115
Phaeton	1,020		

PACKARD—8-26. Standard 8. 125½ W. B.

5 Sedan	2,385		

PACKARD—8-33. Standard 8. 134½ W. B.

2 Roadster	2,425	5 Club Sedan	2,675
4 Phaeton	2,425	4 Sport Phaeton	2,725
2 Coupe	2,525	7 Sedan	2,785
7 Touring	2,525	7 Sedan Lim.	2,885
2 Con. Coupe	2,550	Conv. Sedan	3,465
5 Coupe	2,675		

PACKARD—8-40. De Luxe 8. 140½ W. B.

4 Phaeton	3,490	4 Sport Phaeton	3,790
2 Roadster	3,490	5 Sedan	3,795
2 Coupe	3,545	5 Coupe	3,850
7 Touring	3,595	5 Club Sedan	3,950
2 Conv. Coupe	3,595		

PACKARD—8-45. De Luxe 8. 145½ W. B.

7 Sedan	4,150	7 Sedan Lim.	4,285

PEERLESS—Standard 8. 118 W. B.

5 Sedan	1,495	5 Brougham	1,545
2 Coupe (RS)	1,495	2 Cabriolet (RS)	1,595
5 Club Sedan	1,545		

PEERLESS—Master 8. 125 W. B.

5 Sedan	1,995	5 Brougham	2,045
2 Coupe (RS)	1,995	2 Cabriolet	2,095
5 Club Sedan	2,045		

PEERLESS—Custom 8. 138 W. B.

2 Coupe (RS)	2,795	5 Brougham	2,845
5 Sedan	2,795	7 Sedan	2,945
5 Club Sedan	2,845	7 Limousine	3,145

PIERCE-ARROW—Group C. 8-cyl. 132 W.B.

5 Club Brough.	2,695	5 Sedan	2,875
2-4 Coupe (RS)	2,865		

PIERCE-ARROW—Group B. 8-cyl. 134 W.B.

2-4 Spt. Roadster (RS)	3,125	2-4 Conv. Coupe (RS)	3,350
4 Tourer	3,125	4 Spt. Phaeton	3,425

PIERCE-ARROW—Group B. 8-cyl. 139 W.B.

5 Vic. Coupe	3,475	7 Sedan	3,625
5 Sedan	3,495	5 Club Berline	3,695
5 Club Sedan	3,495	7 Enc. Dr. Limo	3,828

PIERCE-ARROW—Group B. Salon. 139 W.B.

5 Sedan	3,795	5 Club Berline	3,995
5 Club Sedan	3,795	7 Enc. Dr. Limo	4,125
7 Sedan	3,925		

PIERCE-ARROW—Group A. 8-cyl. 144 W.B.

7 Tourer	3,975	7 Sedan	4,485
4 Conv. Coupe (RS)	3,975	7 Enc. Dr. Limo	4,685
		7 A.W. Town Car	6,250

PIERCE-ARROW—Group A. Salon. 144 W.B.

7 Sedan	4,835	7 A. W. Conv. Town Car	6,250
7 Enc. Dr. Lim.	5,035		

PIERCE ARROW—Group "A." Custom. 144 W. B.

2-4 Conv. Roadstr (Le Baron)	5,220	7 Conv. Sedan (Dietrich)	6,425
5 Sedan Limo. (Holbrook)	5,850	7 A.W. Town Car (Willoughby)	6,825
2-4 Conv. Roadstr (Derham)	5,975	7 Enc. Dr. Limo. (Judkins)	7,225
5 Sedan (Le Baron)	6,075	5 Sedan Limo. (Judkins)	7,225
7 Conv. Victoria (Dietrich)	6,125	7 Town Landaulet (Brunn)	8,025

PLYMOUTH—4-cyl. *167

Roadster	535	5 Phaeton	625
5 2-dr. Sedan	565	2-4 Coupe (RS)	625
2 Stand. Coupe	565	5 4-dr. Sedan	625
2-4 Spt Roadster (RS)	610	2-4 Con. Coupe	695

PONTIAC—6-cyl. 110 W. B.

Coupe	665	Sport Coupe	725
Roadster	665	Custom Sedan	785
2-dr. Sedan	665	Phaeton	795
4-dr. Sedan	725		

REO FLYING CLOUD—6 cyl. 125 W. B.

Sedan	$1,695	Coupe	$1,695

REO FLYING CLOUD—8 cyl. 130 W. B.

Sedan	$1,995	Coupe	$1,995

REO ROYALE—8 cyl. 135 W. B.

Sedan	$2,485	Coupe	$2,485

STUDEBAKER—Six. 6-cyl. 114 W. B.

Roadster	795	Sedan	895
Club Sedan	845	Regal Sedan	995
2 Coupe	845	Landau Sedan	995
Tourer	895	Regal Tourer	995
4 Coupe	895		

STUDEBAKER—Commander 8-70. 124 W. B.

4 Coupe	1,585	5 Brougham	
5 Sedan	1,585	(Cloth)	1,785
4 Victoria	1,585	5 Brougham	
5 Regal Sedan	1,785	(Mohair)	1,785

STUDEBAKER—Dictator. 8-cyl. 114 W. B.

2 Coupe	1,095	5 Sedan	1,150
4 Coupe	1,150	Regal Sedan	1,250

STUDEBAKER—President 8-80. 130 W. B.

5 Sedan	1,850	5 State Sedan	
2 Coupe	1,850	(Mohair)	2,050
4 State Roadstr.	1,950	5 State Sedan	
4 State Coupe	2,050	(Cloth)	2,050

STUDEBAKER—President 8-90. 136 W. B.

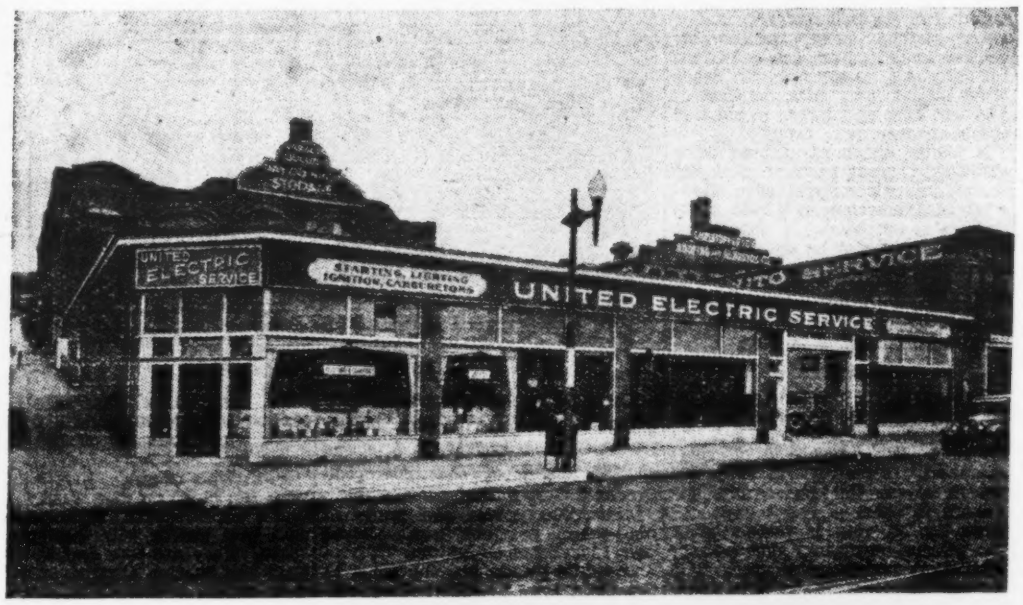
7 Tourer	1,850	State Victoria	2,350
7 State Tourer	2,150	7 State Sedan	
7 Sedan	2,150	(Mohair)	2,350
5 Brougham	2,350	7

MERCHANDISING
ACCESSORIES
EQUIPMENT

WHOLESALE

DISTRIBUTION
SHOP EQUIPMENT
REPLACEMENTS

SHOP OF DULUTH JOBBER IS GRADUALLY BECOMING MAJOR PART OF HIS BUSINESS



By ARTHUR G. PATTERSON

THE United Electric Service Company, jobber, at 301 East Superior St., in Duluth, has built up one of the most successful service departments in the Northwest.

This service department has grown so rapidly that it is now fast becoming the major part of the business.

The service floor of the service department is capable of taking care of sixteen automobiles at one time, with a drive-in service from Superior Street, the main business street of Duluth. In the rear of the building is a large outdoor parking yard, where patrons may leave their automobiles after the work is done. The service floor is 60 by 60 and is equipped with modern devices for testing, repairing and replacing automobile equipment.

In the service department the following types of work are done: Repairing and adjusting of starters, generators, ignition systems, batteries, speedometers, carburetors, hydraulic shock absorbers, automobile wiring, lights, horns, fuel pumps, wind shield wipers and other repair work that is done in a jobber repair department.

A large electrical repair shop, fitted up with modern repair equipment, is operated by men who are well trained and expert in repair work. The electrical repair shop is located right next to the service department, where it can be of convenient service without any waste of time or any other inconvenience.

The service department is open every day from 8 in the morning till 6 at night. The men composing the service staff are paid a guarantee of $100 a month and 35 per cent. on labor sales. Most of the business done in the service department is on a cash basis. All men in the service department and jobbing department wear neat, attractive uniforms.

The wholesale department consists of a large department, where replacement parts for all makes of automobiles are stocked. Such parts as driving lights, hot-water heaters, oil-filter cartridges, radiator shutters, hydraulic shock absorbers, spark plugs and electrical and replacement parts of nearly all types and descriptions are also carried. The United Electric Service Com- is the Duluth jobber for many national advertised accesories. One of the selling points of this company is the Duluth jobber for many trons ever have to wait for replacements to be ordered from the factory.

The firm's service department uses a four-page folder in direct mail advertising. The folder is eight and one-half by eleven inches, and the cover is done in green and white, while the two inside pages are in green and orange. Black type is used.

PHOTO AT TOP shows the building occupied by the United Electric Service Company, jobber, Duluth. The building is 100 by 60, with the service department 60 by 60. Center photo shows the electrical repair shop, while lower picture is a shot of the customers' counter

The first page contains a street diagram at the top center of the page, showing the exact location of the company. The body of the first page contains the following greeting:

"Drive in and give our modern service shop your approval. Your inspection of the place will bring new appreciation of what an up-to-date automotive electric shop has to offer.

"You drive right in when you want service here—summer or winter—and when your needs are met drive straight ahead, out the exit and on your way again. We consider our 'drive-in' feature the most important improvement in our building, and you are invited to try it—to use it.

"A well-lighted service floor, a fully equipped shop, a fine stock of genuine parts and a crew of men who are specialists in carburetor, electrical, battery, speedometer and hydraulic shock absorber work are here to serve you.

"When you experience even the slightest trouble with any of these parts of your car, just drive in at our Superior Street entrance. The trouble will be corrected quickly and at reasonable cost. You will drive on with a feeling that expert service has been rendered, efficiently and economically.

"Our location, just across Third Avenue East from Hotel Duluth, is convenient. You will find us ready to serve you—quickly. Drive in."

The two inside pages contain pictures of the various departments and descriptions of the work that each department renders.

On the last page in a box four and one-half by six inches with a green border the following is printed:

Not a Fable

"Years and years and years ago the railroad companies established for your safety and protection what are now known as "Round Houses" or maintenance shops, where they adjust all their cars and engines at regular intervals whether they seem to need repairs or not. They also had another idea in mind other than your safety and protection. It would and does save them millions of dollars in upkeep (repairs) expense.

"We operate our service shop on the same principle—it will save you lots of money over a period of time if you have your car inspected at regular intervals, and maintained rather than repaired. Your car is a good one and it is the aim of the automotive industry to have it run as economically as possible.

"P. S.—Sure! Your car was running all right an instant before it broke down the last time. Better have it looked over now."

Editor's Column

"MARKET ANALYSIS" is a comparatively simple and a necessary step for merchandisers, and census figures form the most accurate, complete and impartial source of the basic information, according to Dr. Robert J. McFall, chief statistician for distribution in the Bureau of the Census.

Sales methods, he says, have complicated trade channels "until the muddled situation has caused alarm in business circles, with the subsequent demand for fact, which resulted in the current census of distribution."

This census will undobutedly supply a comprehensive picture of the distribution system and give some idea of its ramifications.

"Being comparatively new and somewhat academic, the term market analysis smacks of deep profundity," he continues, "yet the procedure is ancient and commonplace. It is used by everyone who supplies a demand. The same principle is involved when making computations and deductions in a market analysis as are utilized by the housewife in planning her meals.

"When the mother calculates how many 'hot rolls' her family will consume at dinner she is making a market analysis. In making her rolls she probably says to herself: 'Ordinarily twelve rolls are enough. But—let's see—John is playing baseball this afternoon. He surely will eat more rolls than he usually does. Guess maybe I had better make a dozen and a half.'

"Similarly, every retailer, wholesaler and manufacturer makes a market analysis in planning his business. Some analyses, of course, are often made in more or less superficial and haphazard ways, based on hunches, intuitions, and sometime reckless bravado. But it behooves every person who has something to sell to ascertain mathematically his positive and potential market.

"Some concerns have found that by making a sufficiently thorough study of the industry in which they are engaged, the consumption of a given commodity can be predicted with considerable accuracy months in advance.

"Commercial research, as the term is becoming generally used, designated the search for commercial facts to guide industry in planning technical programs, in extending markets for existing products, in determining policy as to new products, and in ascertaining the most economical location for future plant expansion. To make commercial research serve these ends efficiently, there is involved the segregation, compilation, analysis and interpretation of many facts from many varying sources.

"New agencies, new methods and new expenditures have been added by individual manufacturers from time to time to maintain a continuous flow of goods through the channels of distribution of competing goods. These competitive practices of distribution have created a burden from which manufacturers would be glad to be relieved. And these manufacturers and other distributive agencies must find relief by securing better knowledge of the consuming capacity of the markets and adapting their distributive policies more definitely to the needs of the consumer.

"In the interim, many complicating changes have taken place which have only added to the complexity of the distribution system. Originally, the function of wholesaling, for instance, was that of creating a market for manufacturers and disposing of merchandise within an easily served radius. The wholesaler carried a reserve of stock to supply retailers and was looked upon by manufacturers as the market outlet for their products. However, with the development of strenuous competition, many manufacturers developed special sales organizations to call upon retail dealers and interest them in new products or to urge them to buy in large volume products that they were then handling."

Under these conditions the wholesaler ceased to be a market creator and began relying upon the manufacturers to create demand and secure orders which they would fill and distribute. Advertising was looked upon by the manufacturer as a compelling force which would send consumers into retail stores to demand brands or varieties, exploited by the manufacturers. Added to this, many manufacturers put in the field sample distributors, demonstrators and canvassers to compel retailers to distribute the commodities thus introduced, with the result that the retailers became less active in creating markets for new products.

THOMPSON PRODUCTS TO ISSUE NEW CATALOGUE AT COMBINED SHOW

A NEW catalogue which will speed up sales by the jobber will be introduced to the trade during the N. S. P. A. and M. E. A. shows by the Thompson Products Corporation.

The catalogue is said by Thompson officials to be the result of several years' investigation of the jobber catalogue problem. It gains much of its greater efficiency by grouping correlated motor and chassis parts of each car and model. This feature also reduces the bulk of the catalogue.

This catalogue is the first issued by Thompson to group all replacement products of the corporation under one cover. These are quickly located by a master alphabetical index in the first few pages.

TRENTON DISTRIBUTORS PLAN GOOD-WILL TOUR

Trenton, N. J., Oct. 15.—Under direction of the wholesalers and distributors division, chamber of commerce, the third annual good-will tour will be conducted November 1. Plans for this big event were furthered at a meeting of the executive committee of the division at Hotel Sterling.

The plans will be ratified at a meeting of the division members this week. The distributors will be the guests of Fred A. Roberts, manager of the Crane company, and Leon O. Crocker, chairman of the division, will preside.

The wholesalers and distributors plan an extensive tour, and they will distribute souvenirs en route. J. Harry Hearnen, automotive jobber, will be the marshal of the parade of automobiles and trucks. Dinner will be served at Scheibel's, Hightstown.

ODOM BATTERY & TIRE IN NEW $60,000 HOME

Spartanburg, S. C., Oct. 15.—The Odom Battery & Tire Company, one of the largest wholesale and retail automobile accessory concerns in this section of the state, has moved into its new $60,000 home at the corner of South Church and Kennedy Streets. L. A. Odom is president.

Production--Engineering--Factory

Engineering Problems of Modern Motor Cars

The following, in condensed form, is a paper presented before the French Lick Springs meeting of the American Society of Mechanical Engineers, yesterday, by William G. Wall, Indianapolis.

ALTHOUGH the modern car has as much power as is necessary, the public is still demanding more. Greater acceleration, the ability to climb any grade on high gear and at high speed, and quiet operation of the engine and the entire car are demanded by the public.

Multiple-Cylinder Cars Are Here to Stay

The multiple-cylinder engine is here and will probably always remain. In fact, the number of cylinders is gradually increasing. The advent of the sixteen-cylinder Cadillac has stirred up considerable enthusiasm among engineers so that now several sixteen-cylinder engines are nearly ready for the market, while two companies are bringing out cars with twelve-cylinder engines and several other companies that previously built sixes are bringing out eights.

The greater number of cylinders gives a much smoother torque and has very few drawbacks except that of additional cost. An eight-cylinder engine today gives no more trouble, if as much, as did the four-cylinder engine of yesterday. Engineers are concerned, however, over the slightly increased piston friction which results as the number of cylinders increases.

Engine Speed Increasing

Although some companies advocate what they call medium-speed engines, the speed of all engines is gradually going up in order to obtain more power with the same displacement.

Records show that the maximum speed of the four-cylinder engine of the winning car in the 1912 Indianapolis Motor Speedway race was 2,200 r. p. m. The maximum speed of the eight-cylinder engine that won the 1929 race was more than 6,000 r. p. m. Twenty years ago 2,000 r. p. m. was a fair speed for a passenger car engine. Today a number of these engines run at least 4,500 r. p. m.

Front-Wheel Drive

Probably there will be more front-wheel drive cars on the market within the next few months. While the front-wheel drive has a number of advantages, the only disadvantages known to the author are the somewhat greater cost of construction and the necessarily slightly longer wheelbase.

Transmissions and Other Elements

It looked very much last year as though many cars would be equipped with four-speed transmissions. Today, the tendency toward four-speed transmission is not quite so strong, as it has not accomplished what was expected of it. The low speed is very seldom used, and what is advocated for the future is a three-speed transmission with a quiet second and an internal gear clutch in connection with the second speed.

For several years there has been a competition between hydraulic and mechanical brakes. The hydraulic brake seems to be gradually gaining ground.

The question of whether to use the spiral-bevel, hypoid or worm gear is very much one of cost, the hypoid generally being preferred over the spiral-bevel where the matter of cost is not a big factor. The worm drive, although having some advantages, has made very little headway in passenger cars and is much more expensive.

Cost

It has been found that costs are materially reduced by the use of steel stampings in place of castings. Another factor in lowering costs is the use of interchangeable parts, as, for example, using the same cylinders for a six as for an eight, so that the same pistons and rods can be used, interchangeable bearings for different models, and demountable wheels which make the front and rear wheels interchangeable, with the exception of the hubs.

Details of Design

The details of the design and the care with which they are worked out are, if anything, more important than the general specifications. If it is desired to design an engine for a certain displacement and maximum power, the bore would be made nearly equal to the stroke, resulting in what is called a square engine, but as it is generally desirable to limit the length of the engine so as not to have too long a wheel base, this tendency cannot always prevail, and at present the stroke is generally made one-fourth to one-third longer than the bore, although some of the later engines are nearly square.

Light reciprocating parts, such as aluminum pistons, are now generally used. Duralumin rods, while used to some extent, have not proved to be popular.

Pistons

Cast-iron pistons were first used and are still being used to a great extent. As the cast-iron piston has the same coefficient of expansion as the cylinder, there is not such a great difference in the amount of expansion between the two parts.

The weight of the cast-iron piston is an objection, especially in high-speed engines. The fact that it does not carry off the heat and, therefore, has a hotter head than the aluminum piston, is also somewhat detrimental.

The great problem in regard to pistons, aside from making them run quietly and keeping the weight down, has been to keep the oil from getting into the combustion chamber.

The aluminum piston has a number of advantages. Today most aluminum pistons are of the skeleton type. The advantage of the split-skirt type is that the piston can be fitted fairly tightly when the cylinder is cold, so that it will not slap, and yet it will not score when it gets hot and expands. Much difficulty has been experienced with this type of piston because of the large consumption of oil, and much experimental work has been done to eliminate this trouble. The rings play only a small part in the prevention of oil leakage, and the design of the piston has as much, if not more, to do with eliminating this than do the rings.

Recently manufacturers have been experimenting with cylinders having a high rate of expansion. This cylinder material is an alloy, generally a chrome-nickel cast iron, and seems to have a number of advantages.

If a piston moves perfectly in line with its direction of travel, there is very little pumping of the oil by the oil rings in the grooves, but if the piston "teeters," then there is an excessive amount of pumping.

There are a number of ways of preventing this. One way to prevent this is to hollow-grind the skirt of a skeleton piston so that when it becomes heated and expands, the center will bulge no more than the ends. The idea is to make the skirt perfectly parallel at high temperature, which will be concave at low temperature. Making the skirt much longer above the piston pin helps materially. The skirt should be quite rigid and so designed that the heat flow from the piston-pin boss to it will be uniform. In nearly all aluminum pistons the skirt is separated from the piston head by a saw-cut around all or part of its periphery.

Piston Pins

The piston pin was originally held in the piston with set screws. The almost universal practice at present is either to use a pin clamped by the rod and free in the piston or else a floating pin.

Cast-iron pistons with floating pins and no bushings have been tried many times, but experience has taught that bronze bushings are quite necessary in cast-iron pistons. Aluminum pistons, however, are quite satisfactory without being bushed for the pins.

In order to conduct the heat away from the head of the piston, a slight taper from the top toward the skirt is found in the best designs. Today, most pistons have considerably thicker heads. The newer pistons for airplane engines have heads more than 1 inch thick for sizes of 4½ inch bore and larger to conduct the heat away more rapidly.

A piston pin must possess three qualities; it must be hard, perfectly round, and extremely smooth. Generally a scleroscopic hardness of 80 degrees is specified. A pin to act properly must not be out of round more than 0.00025 inch. The surface must look smooth even under the microscope in order to give the best service. This is accomplished by careful grinding and lapping.

Rings

It is common practice to use two compression rings and one oil ring, or three compression rings and one oil ring. Sometimes two oil rings are used. Generally, oil rings are placed above the piston pin, although in some of the V-type engines an oil ring is placed below the piston pin when cast iron or truck-type pistons were used. The present practice is to use plain rings, either cast or hammered.

Valves

While many different types of sleeve valves have been tried out, none of them, with the exception of the Knight double sleeve valve, has made any material progress, and nearly all engines today use poppet valves.

A great diversity of material is used in poppet valves, most of the original ones having been made with cast iron heads.

The admission valve does not give much trouble if properly ground and seated, but the exhaust valve in all gasoline engines is a continual source of trouble. At present, most exhaust valves are made of alloy steel.

A considerable amount of additional power may be obtained from a poppet-valve engine by preventing the warping of the exhaust valve and seat by circulating more water around the seat. This additional water not only prevents the warping of the valve, but, by keeping the valve properly cooled, has eliminated the tendency to preignition and has also prevented the formation of carbon on the valves and seats.

For maximum power at high speeds the valves should be quite large in proportion to the displacement. However, a large valve can cause more trouble than a small one on account of the difficulty of cooling it and its weight.

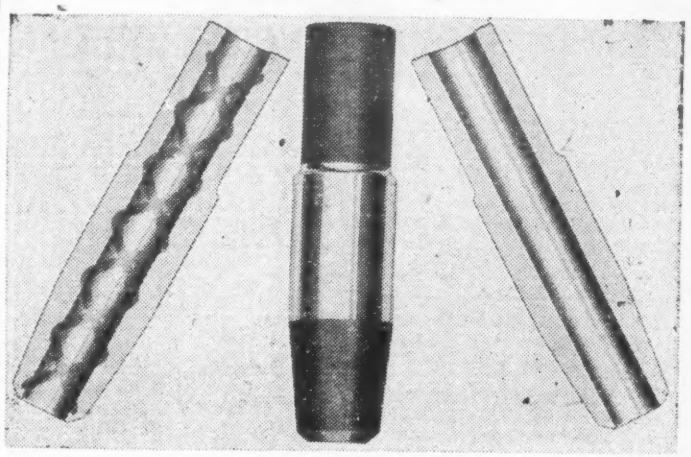
Better seating, as far as holding compression is concerned, is obtained if the seat is quite narrow, 3-64-inch wide for a small valve, say 1½ inch diameter. There are only two ways in which heat is carried away from a valve; one is through the seat and the other through the stem. It is necessary for the seat to be at least 1-16 inch wide; and for a valve of the size stated, most manufacturers use a 3-32-inch seat. This seat gets wider as the valves are ground in.

It is common practice to make the exhaust valve about 10 per cent. smaller than the admission valve.

The use of multiple valves has become quite popular, especially with the valve-in-the-head type of engine in which there are four valves. This arrangement has not only the advantage of the large amount of area for the admission and exhaust, but also allows the spark plug to be put in the most advantageous position at the center of the combustion chamber. The increase of power in some recent engines having four valves per cylinder and with the spark plug in the center of the combustion chamber, as against two valves with even two spark plugs on the sides, is as much as 25 per cent. in the same engine. This is about the same increase in power that would result from the use of a

(Continued on Page 9)

THOMPSON WILL SHOW NEW VALVE GUIDES



Thompson Valve Guides

The new line of Thompson valve guides will be on exhibition during the N. S. P. A. and M. E. A. shows at the booth of the Thompson Products Corporation.

The plain guides are made of high-grade pearlitic iron, alloyed with nickel and chromium.

Graphite guides are the same as the plain type in external appearance, but have internal spiral grooves filled with graphite, to minimize the tendency of the valve stems to stick.

Both types of guides have a hardness of 90-95 on the Rockwell B scale, as compared with ordinary soft iron guides with hardness of 70-80. They are core cast to insure that the bearing surface is of the wear-resisting alloy.

MANUAL ON DISPOSAL OF REFINERY WASTES TO BE PUBLISHED

New York, Oct. 15.—The first section of a contemplated manual on disposal of refinery wastes will be published shortly in the first, or 1930, edition by the American Petroleum Institute.

The manual is being prepared by the committee on disposal of refinery wastes of the institute's division of refining, under the chairmanship of A. S. Russell, in collaboration with similar committees of the divisions of production and marketing.

The first section, recommended for publication by the general committee of the division of refining at the recent meeting in Tulsa and approved by the executive committee of the board of directors, concerns the disposal of waste water containing oil. It covers sources of oil in waste water, methods and devices for handling waste water and removing oil, recommended good practice for handling waste water and removing oil, recommended equipment and facilities, recommend operation and maintenance and four appendices covering pollution of surface waters by oil, waste water separators, waste water emulsions and sampling and testing waste water for oil.

Three additional sections of the manual are being prepared. Section 2 will cover waste gases and vapors; section 3, waste water containing chemicals, and section 4, waste water containing solids.

CONTRACTS AWARDED BY AERONAUTICS' BRANCH

Washington, Oct. 15.—Contracts totaling $106,751.59 have been awarded recently by the aeronautics branch of the Department of Commerce for equipment and work on the airways. The contracts include radio marker beacons, airway course lights, an electric power plant, and clearing, grading, conditioning and fencing six intermediate landing fields.

Automotive Engineer
experienced in both Diesel and gasoline engine design would like to connect with reliable organization. Fefer inquiries to Technical Editor, Automotive Daily News.

OIL MEN TO CONSIDER PROBLEMS OF INDUSTRY AT INSTITUTE MEETING

Chicago, Oct. 15.—Interest of oil men in the annual meetings of the American Petroleum Institute, the eleventh of which will be held in the Stevens Hotel here November 10 to 13, 1930, has grown with the problems of the peroleum industry, Institue records show.

Comparatively few of those actively engaged in the work of the industry attended the first annual meeting held at Washington, D. C., in November, 1920, while attendance at recent meetings has exceeded 3,500. The matter of obtaining accommodations for the affair has become something of a problem in itself.

More than seventy meetings, exclusive of special gatherings and the annual dinner, have been arranged for the eleventh annual meeting. Twenty-five committee meetings are scheduled for Monday, November 10, and twenty-seven for Tuesday, with at least one general session. Seven group sessions will be held Wednesday and three group sessions and three business sessions on Thursday.

Among the subjects to be considered are:

Disposal of waste, fire prevention, conservation, transportation, standardization, safety, hydrogenation, motor fuels, unitization, drilling and production practice, marketing code, public relations, statistics, research, oil accounting, engineering, tests and specifications.

In addition, there will be meetings of the board of councilors, board of directors, general committees of the three divisions and other groups.

NEW TYPE PLANE ENGINE PASSES FLYING TESTS

Buffalo, Oct. 15.—An airplane engine of radical design has passed flying tests in a light plane at the Kinney Flying Service Field here. The motor has no valves, no push-rods, or no springs, which are required in the regulation airplane motor.

The new power plant has six cylinders, and produces 65 horse power. Due to the fact that there is no oil pump, a contributory cause of forced landings have been eliminated, according to Lieut. Hugh Nicholson, chief test pilot of the company.

On one flight the plane left the runways within thirty seconds after the motor was started.

Engineering Problems of Modern Motor Cars

(Continued from Page 8)

the cylinder, to the improper cool-supercharger. A large part of this increased power is, however, due to the placing of the spark plug in the center of the combustion chamber.

The purpose of manifolding is to obtain a uniform and equal distribution of the gas to all of the cylinders. The speed of the gas through the manifold should be constant, or there should be a gradual increase in speed from carburetor to valve port. It is very important that there be no large sections producing stagnant pools, so to speak, or any small section where there is wire-drawing. One reason that it is so difficult to make a proper manifold is the fact that for maximum power and speed a large section through the manifold is desirable so that a great quantity of gas can get through to the cylinders, whereas for slow running with the throttle partly closed, a small section is desirable in order to maintain the speed of gas stream. As it is difficult to secure such a change in the size of the manifold when the engine is running, the size of the section is reduced to something between the two extremes.

As twin ports are used on many gasoline engines, it is necessary for the branches of any manifold to project into the engine at right angles so that the stream of gas will not be deflected against one side, producing too rich a mixture in the opposite cylinder. It has been found that the perfect right-angle manifold, with sharp corners, has undue friction and tends to hold back the charge for any particular size of section, making it impossible to get the maximum power out of the engine. Generally a compromise is effected by using branches long enough to straighten out the charge, even though quite large radii are used at the corners to reduce the gas friction.

The question of whether the manifold should be square or round in cross-section is of no great importance, although the best results seem to come from the use of the round manifold.

The opinion was held at one time that it was most important for each branch of the manifold to be of the same length. It has been found that the importance of this feature has been overestimated. The object is to distribute the fuel equally into the different ports. A number of other factors of greater importance exist, such as the area of the cross-section of the riser and the different branches, the slope of the branches, and the proper amount of heat to apply and how it is regulated. The manifold should slope either toward the valves or back to the carburetor, so as to obtain proper drainage.

Combustion Chambers

The shape of the combustion space, the compression ratio, the location of the spark plug, and the position of the valves have been among the hardest problems to solve, due to the fact that so little is known about what is taking place in the combustion chamber when the engine is firing. It has only been in the last few years that an inkling of just what does happen has been discovered. There is no doubt that the compact combustion chamber has a number of advantages and will give higher efficiency, other conditions being equal. For this reason the T-head engine has practically gone out of existence, and the valve-in-the-head engine, in spite of being more expensive to build, has become more popular. Unless the combustion chamber of the valve-in-head type is properly designed, it will be found to be very little, if any, more efficient than the L-head type of combustion chamber.

Compression ratios of gasoline engines vary from four to one to eight to one. Generally speaking, the higher the compression ratio, the more efficient an engine will be, providing, however, that there is no knocking or preignition.

Special fuels influence detonation decidedly and materially decrease the knock in an engine.

Preignition is generally caused by overheating of some part in or around the head; and quite often this is due to too high a compression ratio, to some projection in ing of spark plugs, to the improper cooling or seating of the exhaust valve, or to a piston head that is too thin and does not carry off the heat. These are only a few of the causes of preignition.

The path of travel of the gas entering the cylinder and the amount of turbulence are problems intimately associated with the shape of the combustion chamber. At least a part of the cool gas coming in through the intake valve should pass over the exhaust valve.

Opinions as to the exact shape of the combustion chamber vary. The Ricardo principle demands considerable turbulence, to produce which the shape of the combustion space should be such as to cover up part of the piston and also to leave a comparatively small neck between the combustion chamber and the cylinder through which the gas expands. In a modified form it has some advantages.

Another type of head, of which R. N. Janeway is the principal advocate, has an L-head combustion chamber with a vertical wall running straight across it at about the center of the piston. A double-dome combustion head, developed by George H. Freers, has given excellent results.

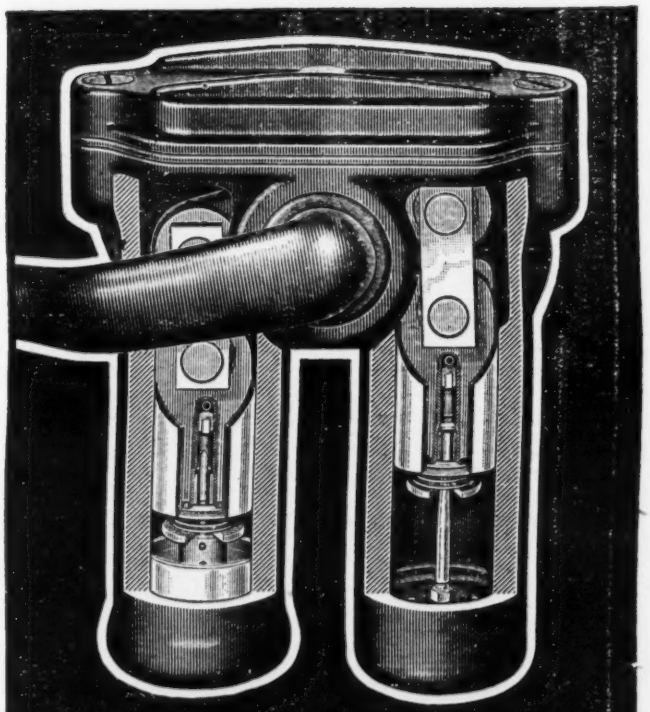
The best results that the author has obtained in using the L-head combustion chamber have come from a combination of some of these ideas. This has resulted in a vertical circular wall near the piston center covering at least one-half of the piston, so that the distance between the piston and the head it not more than one-sixteenth inch, and instead of a narrow neck as used by Ricardo, a broad neck or connecting chamber seems to give the best results.

All of these shapes, however, depend greatly upon the position of the spark plug. Even with the best combustion chamber ever designed, the improper location of the spark plug will give poor results. The best location of the spark plug for power, in the L-head type of combustion chamber, seems to be the center of a triangle formed by lines running through the centers of the valves and the near edge of the cylinder.

One of the most inefficient types of valve-in-the-head engine has a circular combustion chamber with the spark plug on one side, or with two spark plugs, one on each side. The most efficient type has four valves and a slightly domed or hemispherical head, with the spark plug placed in the center of the space between the four valves. Another type of cumbustion chamber nearly as efficient is the round head with two valves and a spark plug located at an angle between the valves and as near the center of the combustion space as possible.

ENTIRELY DIFFERENT

THE FIRST AND ONLY SPRING CONTROL 100% SELF ADJUSTING TO ALL LOADS AND ROADS



Cross-Section of Double Cylinder Hydro-Cushion

An entirely new range of possibilities affecting car spring control and design, is opened to the motor car manufacturer by the Stewart-Warner Hydro-Cushion — the new self-adjusting, double-acting Hydraulic Spring Control.

This spring control is completely self-adjusting to all LOAD variation as well as all ROAD variation. For the first time it affords a center always in true relation to the normal position of the springs.

This makes possible the use of a Variable By-Pass which gives to all spring action a tapered control accurately metered in accordance with the need.

Hydro-Cushions are made in two sizes, each size in Double and Single Cylinder type.

Note the outstanding Hydro-Cushion features listed opposite. Stewart-Warner Corporation, Chicago, Illinois.

OUR ENGINEERS ARE AT YOUR COMMAND » » » » » »

Every Precedent Of Spring Control Efficiency Smashed By This Combination Of Features:

1. *Compensator for LOAD Variation.*
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4. *Leak-Proof Construction.*
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6. *A Type and Size for Every Need — Each 100% Self-Adjusting.*

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DOUBLE-ACTING, SELF-ADJUSTING HYDRAULIC SHOCK ABSORBERS

WEEKLY BUSINESS INDICATORS

REPRODUCED BY ARRANGEMENT WITH THE SURVEY OF CURRENT BUSINESS

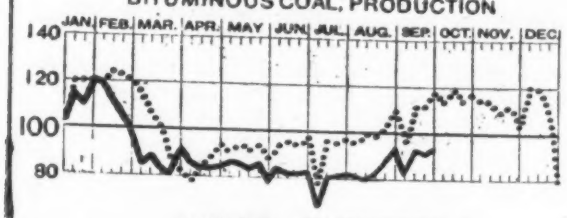
U. S. DEPARTMENT OF COMMERCE

DATA PLOTTED, WHERE AVAILABLE FOR WEEK ENDING OCTOBER 4, 1930

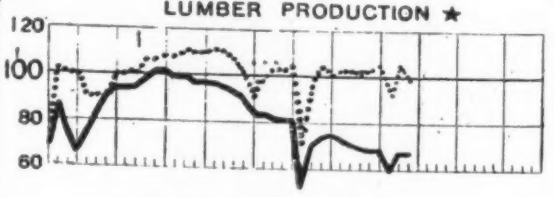
WEEKLY AVERAGE, 1923-1925, INCLUSIVE =100

~LEGEND~
..... 1929
——— 1930

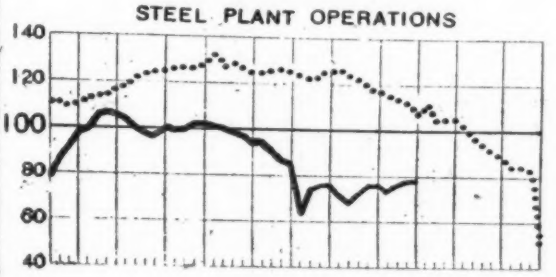
BITUMINOUS COAL, PRODUCTION



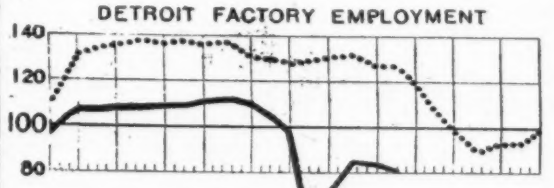
LUMBER PRODUCTION ★



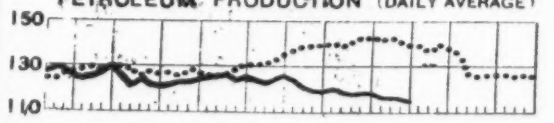
STEEL PLANT OPERATIONS



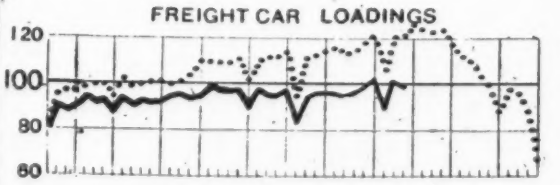
DETROIT FACTORY EMPLOYMENT



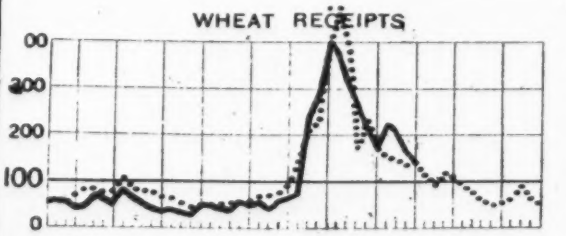
PETROLEUM PRODUCTION (DAILY AVERAGE)



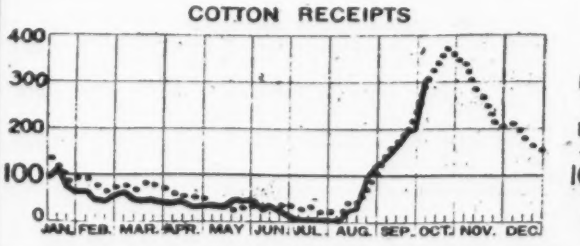
FREIGHT CAR LOADINGS



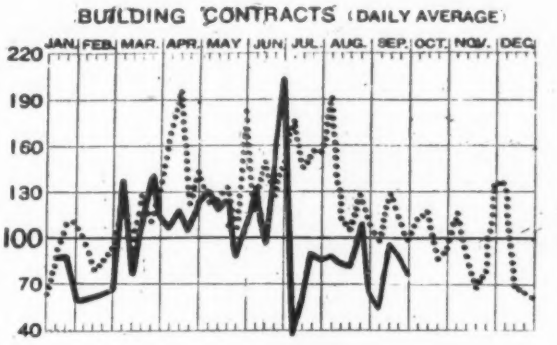
WHEAT RECEIPTS



COTTON RECEIPTS



BUILDING CONTRACTS (DAILY AVERAGE)



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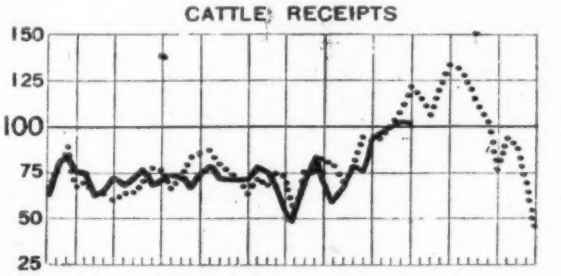
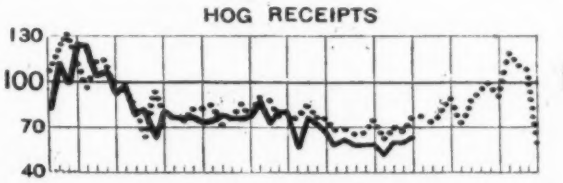
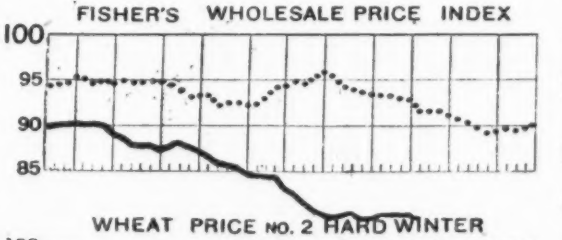


HOG RECEIPTS

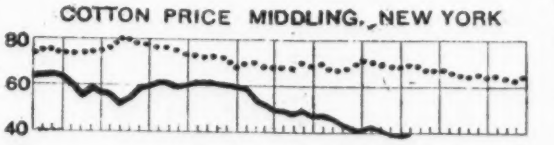


FISHER'S WHOLESALE PRICE INDEX

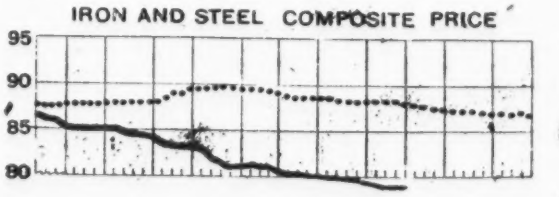


WHEAT PRICE No. 2 HARD WINTER

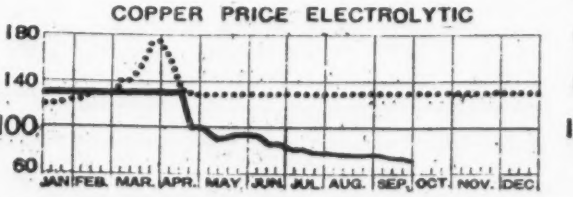
COTTON PRICE MIDDLING, NEW YORK



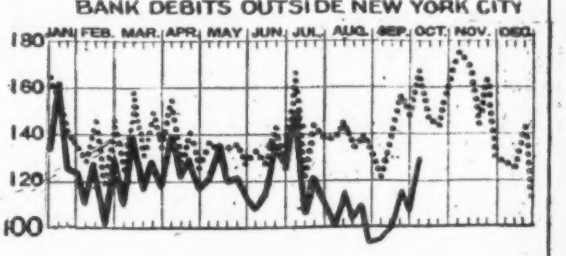
IRON AND STEEL COMPOSITE PRICE



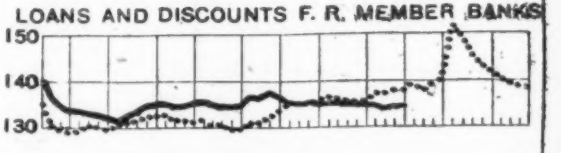
COPPER PRICE ELECTROLYTIC



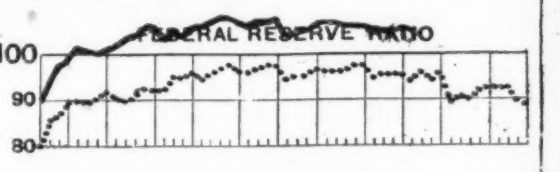
BANK DEBITS OUTSIDE NEW YORK CITY



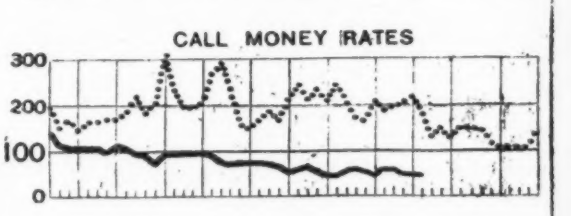
LOANS AND DISCOUNTS F. R. MEMBER BANKS



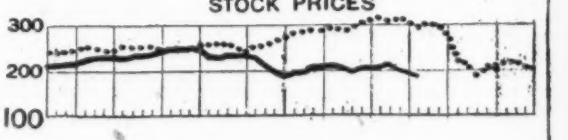
FEDERAL RESERVE RATIO



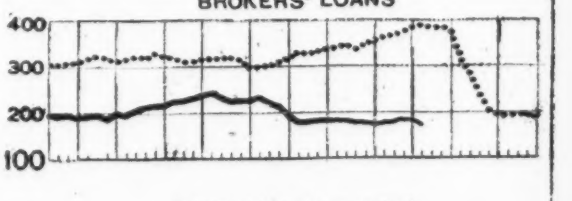
CALL MONEY RATES



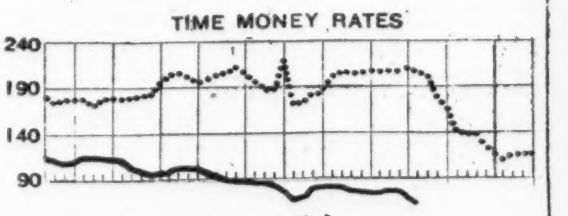
STOCK PRICES



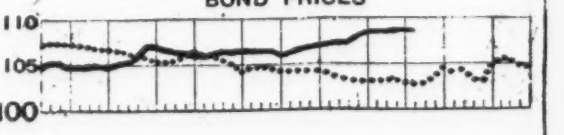
BROKERS' LOANS



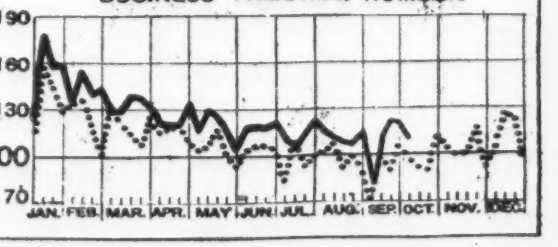
TIME MONEY RATES



BOND PRICES



BUSINESS FAILURES, NUMBER



★ RELATION TO WEEKLY AVERAGES 1927-1929 PER WEEK SHOWN.

Service Notes

HUBBELL AND PLOCOVICH BUY SERVICE STATION

Aberdeen, Wash., Oct. 15.—R. W. Hubbell and Robert Plocovich have purchased the Mack Super Service Station here. They will conduct a general super service station business and will do automobile and brake repairing as well as carry a stock of batteries, tires and accessories.

NEW JERSEY CONCERN GRANTED CHARTER

Newark, N. J., Oct. 15.—The International Safety Number Plate Corporation, manufacturing markers for automobiles, has been chartered with a capitalization of $100,000 by Danforth Geer, Jr., Short Hills; Donald Vail, Ridgewood, and Frank A. Byrnes, Brooklyn.

PEASE AND MAIRS HONORED IN TACOMA

Tacoma, Wash., Oct. 15.—Arthur Pease of Pease Brothers, Tacoma and Centralia automobile accessory firm, and Thomas Mairs, of the Packard Tacoma Company, have been elected to the board of trustees of the Tacoma Yacht Club.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

AYRES SEES MOTOR GAINS NEXT YEAR

(Continued from Page 1)

In the post-war depression it lasted twelve months. This one has already lasted fourteen months."

Readjustments that start recovery work themselves through in relatively uniform periods of time, the bulletin explains. Excess stocks of goods are worked off. Shortages develop. Idle hands seek employment. Business men and industrialists call on their reserves for initiative. Decreased costs stimulate construction. Forces necessary to revival foment silently and invisibly. Finally they become effective and apparent.

"They are at work now," affirms Col. Ayres, "and they will bring recovery from this depression, as they always have from former depressions."

The Cleveland banker declares it is increasingly clear that "a real tire shortage" is in the making. The steel industry, neither prince nor pauper this year, is described as a "cautiously confident commoner." Both building construction and automobile production, he believes, will show important increases next spring.

"Rubber companies have suffered even greater curtailment of their sales and more serious inventory losses this year than have most other kinds of industrial corporations. This is particularly true of the companies making automobile tires.

"There are two chief reasons for the present misfortunes of the tire companies. The first is that American motorists have been economizing in their expenditures this year and postponing the replacement of tires on their cars to a degree that is truly astonishing. The second reason is that crude rubber which was carried last year in company balance sheets at around 20 cents a pound is now worth about 7 cents a pound, and so severe inventory writedowns have been necessary, amounting in the cases of some large companies to more than a million dollars for each cent of shrinkage in the price of rubber per pound."

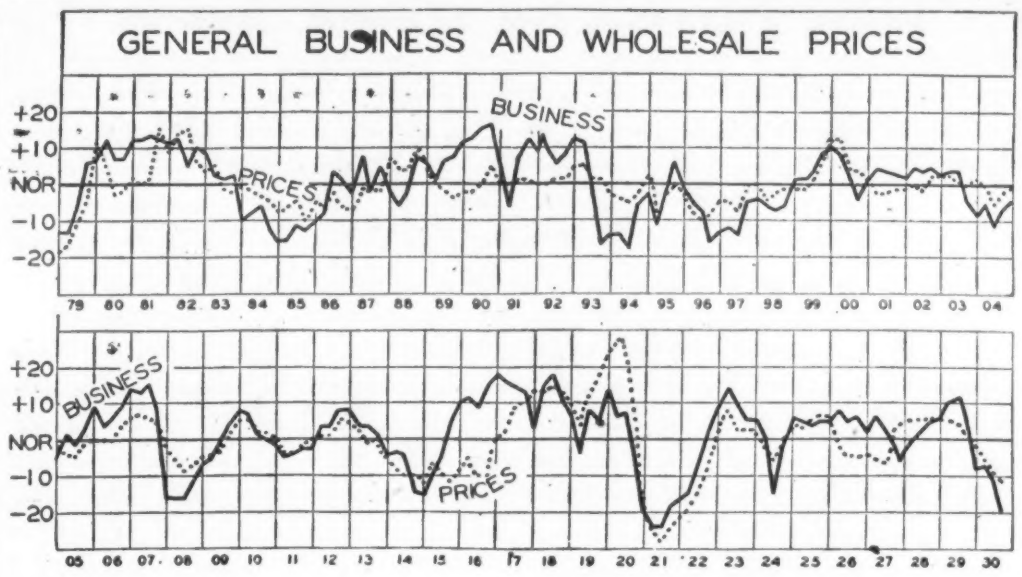
The writer comes to his conclusion of a probable tire shortage by a study of the comparative records of the number of cars in use, the amount of gasoline consumed and the number of tires sold. These comparisons are shown in the accompanying chart. The solid black line represents the number of tires sold in this country to automobile users in the first six months of each of the past ten years. Sales to manufacturers of automobiles are not included. The other lines represent gasoline consumed and cars in use. Each line is made to represent percentages of its own ten-year average.

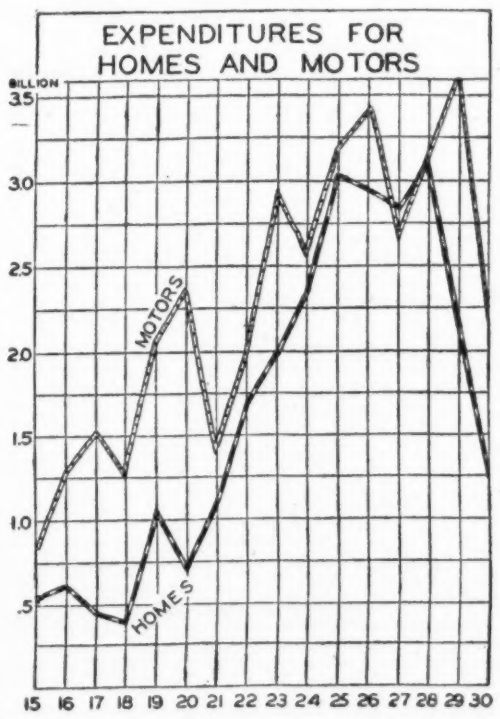
The lines on the chart indicate the tires sold, gasoline consumed, and the number of cars in use advance together somewhat irregularly until 1930 is reached. Then gasoline consumption continues to advance at an almost normal rate, as do the number of cars in use, while tire sales decline to levels below those of 1925.

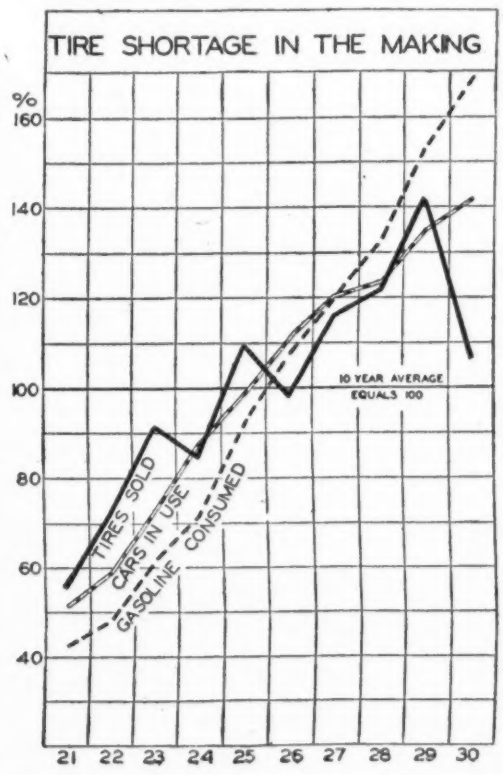
"Clearly," says Col. Ayres, commenting upon this showing, "the consumption of new replacement tires this year is far below normal. People have continued to use their cars about as much as formerly, but they have made their old tires continue in service a good deal longer. Millions of American automobile owners are going into the autumn and winter with tire treads worn smooth and thin. The prospects are that when the first hot spring days come there are going to be unprecedentedly numerous blowouts. Tires are more durable than ever before, but, nevertheless, they eventually wear out."

Pointing out that building construction and automobile production in the years since the war have been potent factors in sustaining general business activity, with both suffering severe declines this year, Col. Ayres sets to work comparing the records in these two major activities. He finds that expenditures for new automobiles have been almost uniformly considerably in excess of those for new residences, as shown in the second accompanying chart, and the fluctuations of automobile sales from year to year have become distinctly more irregular. The decline in automobile expenditures in 1930, he estimates, will be even greater than the decline in expenditures for new homes, probably falling to a little above the total for 1922. Expenditures for new homes are likely to be lower than for any year since 1921.

"When 1931 begins, volume of residential construction will have been declining sharply for two years and that of automobiles for one year. Costs for both will be so low that much better value will be obtainable for a given expenditure than has recently been the case. It seems reasonable to expect that important increases will result."







GENERAL ELECTRIC SHOWS FALLING OFF IN ORDERS

Schenectady, Oct. 15.—General Electric Company orders received during the third quarter of 1930 amounted to $77,338,074, compared with $116,688,014 for the corresponding quarter last year, President Gerard Swope has announced. Orders received during the first nine months of 1930 amounted to $267,651,832, compared with $337,404,470 during the corresponding period last year.

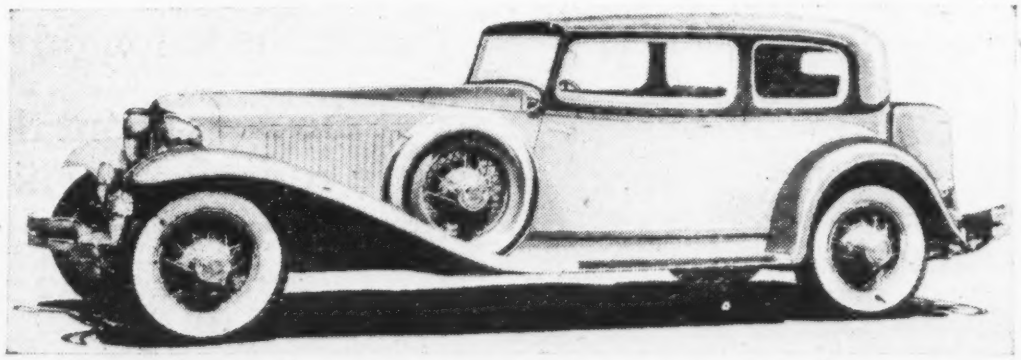
Sales billed for the first nine months of 1930 amounted to $287,886,541.05, compared with $301,812,808.55 for the corresponding period last year.

The profit available for dividends on stock for the first nine months is equivalent to $1.47 per share in 1930 and $1.66 per share in 1929 on the shares now outstanding.

CITIES SERVICE BUYS HANGER & MAXFIELD

Bloomington, Ill., Oct. 15.—Hanger & Maxfield, wholesale and retail gasoline and oil company, established here twenty-six years ago, has been sold to the Cities Service Company for $500,000. Fifteen service stations, bulk plants and other property in the city were involved in the transfer. H. Delbert Hanger and Kate B. Maxfield formed a partnership in 1904, succeeding J. L. Beath & Co., and in 1906 entered the wholesale field.

New Cord Front Drive Victoria Coupe



THE NEW CORD FRONT DRIVE VICTORIA COUPE was designed by Le Grande for the coming salons. Fenders, body moldings and window panels are in dark Capucine with lower body and window reveals in a lighter color and the chassis in a flame, the entire body set off by flame striping. Wheels and cowl saddle molding are chrome

OKLAHOMA PRORATION OF OIL IS UPHELD

Oklahoma City, Oct. 15.—The Oklahoma Supreme Court has upheld the constitutionality of the state oil conservation laws and the jurisdiction of the State Corporation Commission to administer them in the form of proration of the output of flush oil fields.

The decision was issued in a suit brought by the C. C. Julian Oil and Royalties Company, seeking to restrain the Corporation Commission from enforcing its proration orders in the Oklahoma City field as to that company.

The majority opinion held that the state oil conservation act "as a whole provides a valid method of preventing waste of oil in this state, that the same is a proper exercise of the police power of the state and that the Julian company has not been deprived of any of its constitutional rights."

FIRST STATE SECTION ORGANIZED BY INSTITUTE DIVISION OF MARKETING

New York, Oct. 15.—Organization of the Maryland-District of Columbia Section, Division of Marketing, American Petroleum Institute, has been approved by the general committee of the division.

It is the first state section to be organized under the recently adopted divisional organization plan of the institute, and automatically takes over the work heretofore done by the Maryland-District of Columbia Code Committee. In addition, the state section may hold open meetings for the discussion of marketing problems and make recommendations to the general committee of the division.

Peyton S. Cochran, Sun Oil Company, Baltimore, Md., has been chairman of the code committee. While ordinarily section organizations are confined to one state, the District of Columbia is included in this section because of its connection with the code committee.

USE OF CRUDE RUBBER LAST MONTH 25,288 TONS

New York, Oct. 15.—Consumption of crude rubber by manufacturers in the United States for the month of September is estimated at 25,288 long tons by the Rubber Manufacturers Association in its monthly statistical compilation, issued today.

Imports of crude rubber into the United States during the month of September total 39,467 long tons.

The association estimates total domestic stocks of crude rubber on hand and in transit overland September 30 at 169,607 long tons. Crude rubber afloat for United States ports is estimated at 60,923 long tons.

CHANGES IN VLCHEK TOOL PERSONNEL ANNOUNCED

Cleveland, Oct. 15.—Announcement has just been made by Frank J. Vlchek, president of the Vlchek Tool Company, of the resignation of F. S. Macourek as secretary and treasurer of the company. The changes effected by the resignation of Mr. Macourek, who is retiring from active business, are as follows: E. C. Koster, former vice-president and factory manager, is now executive vice-president; J. C. Wattleworth, formerly assistant factory manager, becomes factory manager; D. B. Wilson has been elected secretary and H. F. Vlchek treasurer of the company.

EXIDE BATTERY DEALERS MEET AT JACKSON, MISS.

Jackson, Miss., Oct. 15 (UTPS).—Approximately 200 Exide battery dealers gathered here recently for the annual state convention. While here they were the guests of the Central Battery Company, and sessions were held at the Edwards Hotel, according to R. E. Hines, president of the company, state distributors.

A. J. NEU JOINS REO COMPANY AT NEWARK

Newark, N. J., Oct. 15.—Arthur J. Neu of East Orange has joined the staff of the Reo Motor Company at 191 Central Ave., here.

Big Crash in Stock Market

No, no, no! Not today. Last November. How well we all know. But it isn't news any more. It was only news when it happened. It's history now.

And so with news of the automotive industry. It must be published while it's hot; while it still has business value. Whether the news interests a factory, a distributor, dealer, or jobber, you'll find it first in Automotive Daily News. Registrations of cars and trucks, reports of association meetings, shows, new parts, accessories, shop equipment---the important happenings in all branches before your eyes, daily.

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DUAL SHOW ISSUES

November 13th, 14th, 15th, 17th, 18th

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